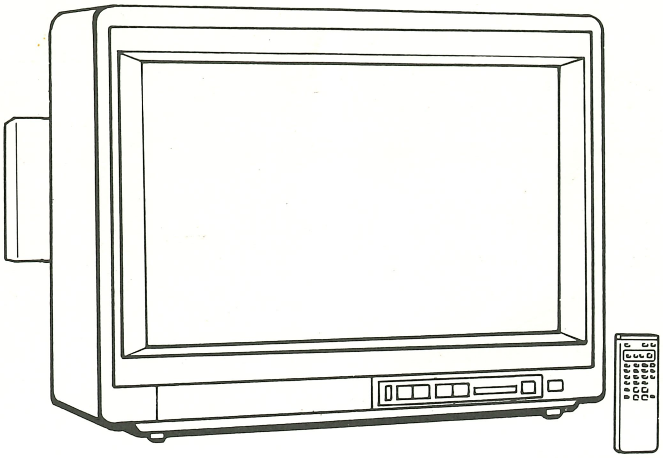
2527

KV-2093R
RM-735

SERVICE MANUAL

US Model
Chassis No. SCC-648V-A



P3 CHASSIS

February, 1986

SPECIFICATIONS

Television system	American TV standards
Channel coverage	VHF: 2-13 UHF: 14-69 Cable TV: 1-125
Picture tube	Microblack Trinitron tube **20-inch picture measured diagonally** 21-inch picture tube measured nally
Input	/L jack, 408 mVrms (100% ation), more than 47 k ohms Video phono jack, 1 Vp-p, 75 ohms, unbalanced, sync negative
Output	Audio R/L phono jack, 408 mVrms (100% modulation), more than 47 k ohms Video phono jack, 1 Vp-p, 75 ohms, unbalanced sync negative

Power requirements	120 V AC, 60 Hz
Power consumption	130 W (max.) 6 W (in standby condition)
Accessories supplied	Remote Commander RM-735 with 2 size AA batteries Telescopic dipole antenna Antenna connector
Optional accessories	Connecting cord RK-74A VMC-2P3

Design and specifications are subject to change without notice.

MICROFILM

TRINITRON® COLOR TV

SONY®

CTV

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WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any).
   Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
9. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

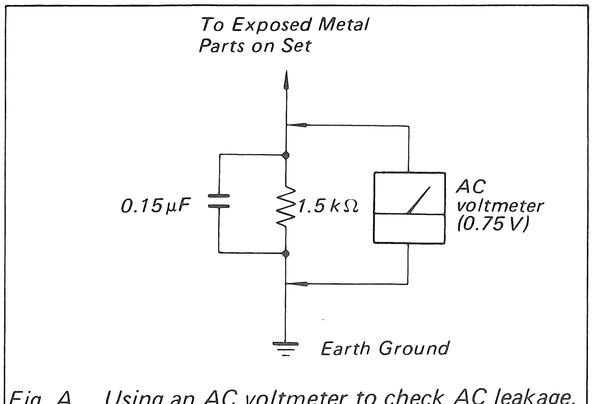


Fig. A. Using an AC voltmeter to check AC leakage.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60–100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

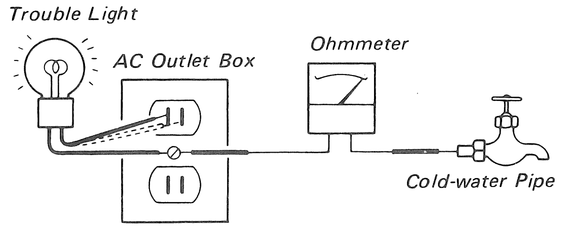


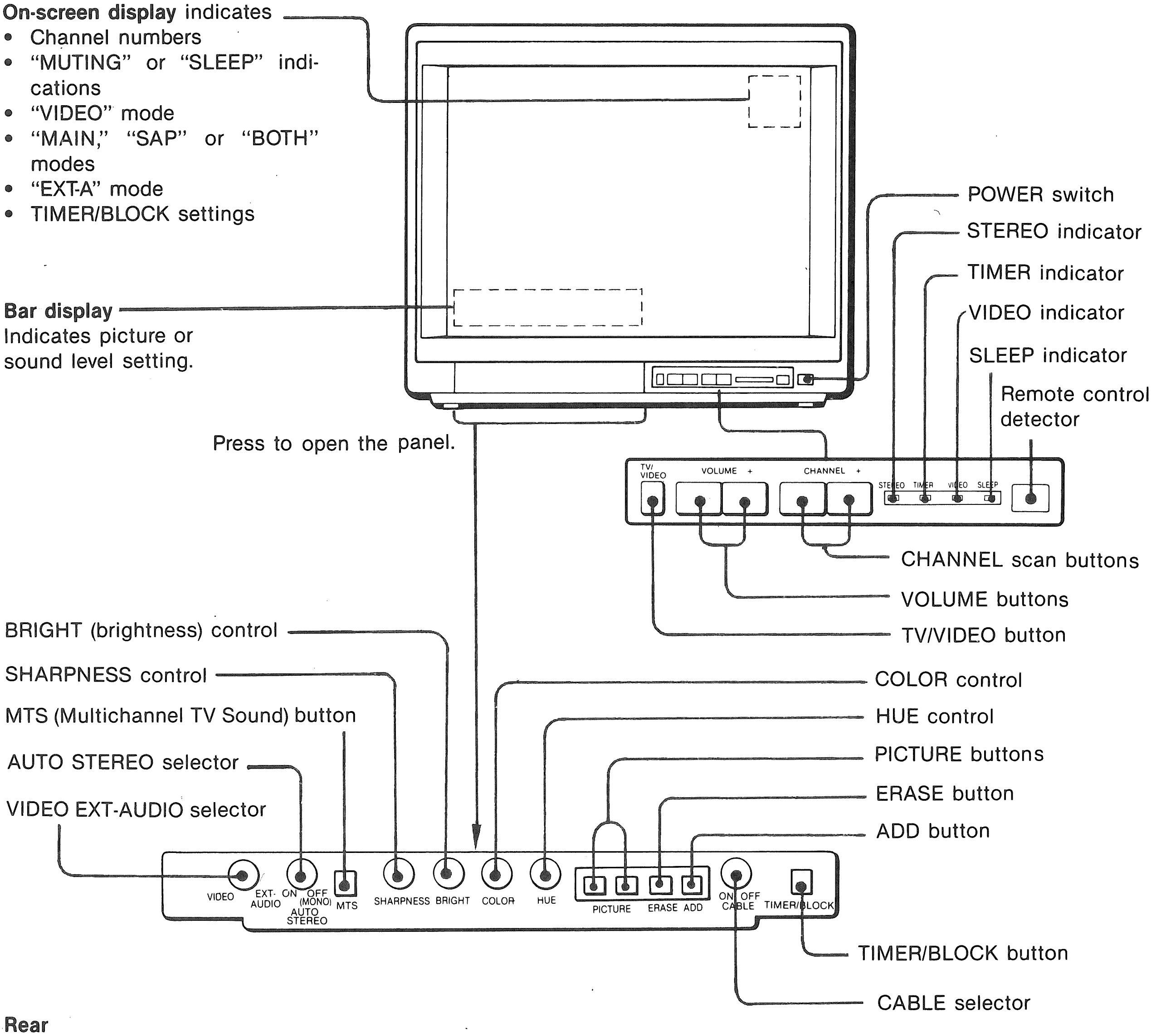
Fig. B. Checking for earth ground.

SECTION 1
GENERAL

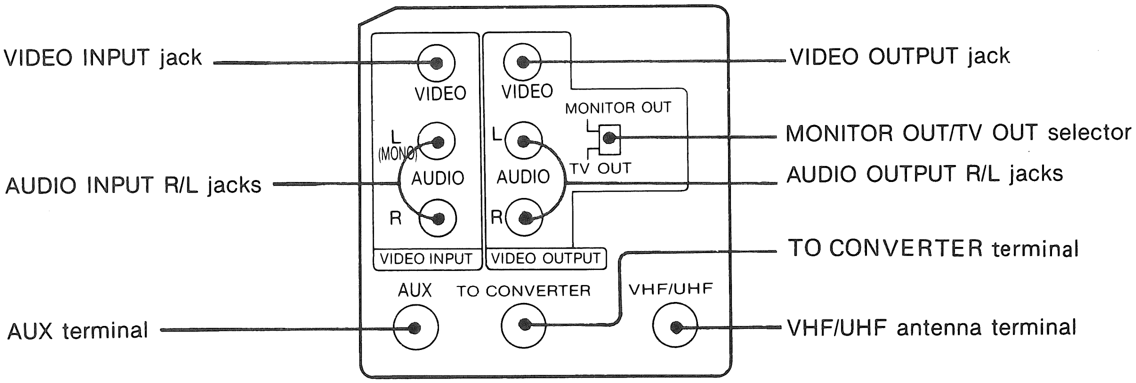
1-1. LOCATION OF CONTROLS

For further details, refer to the page numbers next to each item.

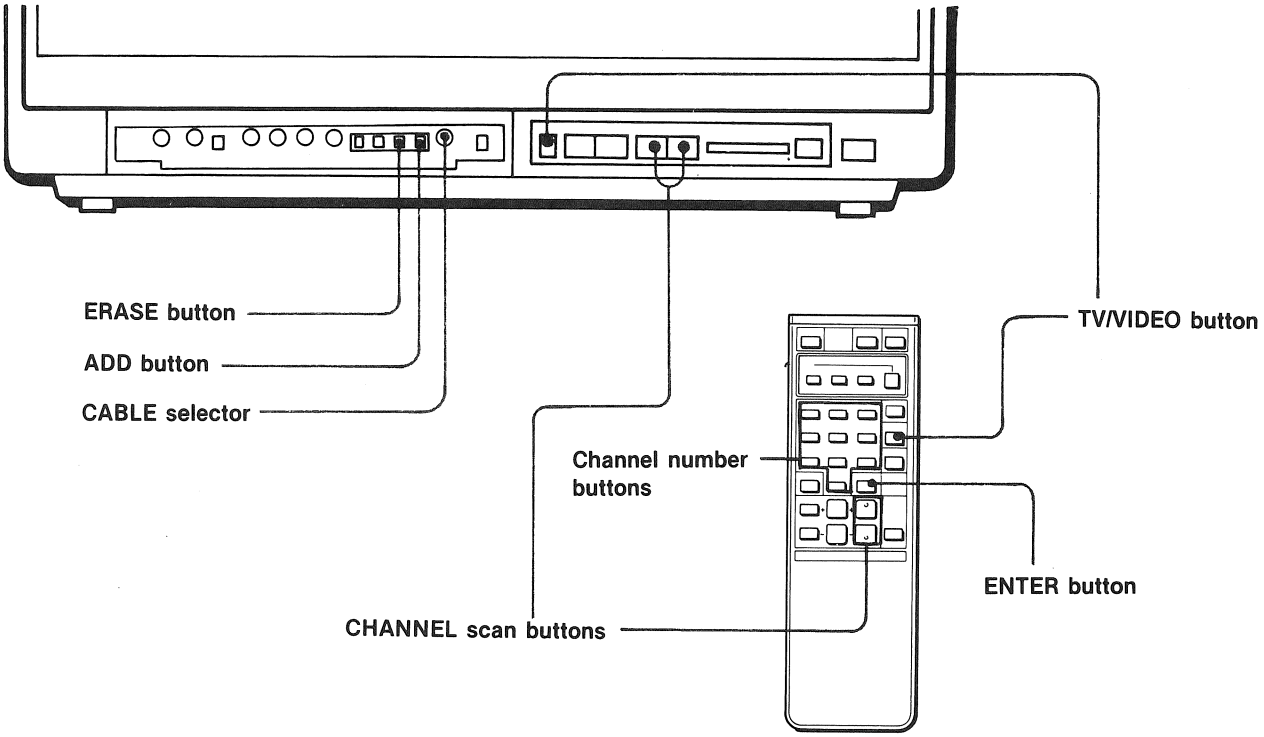
Front


On-screen display indicates
• Channel numbers
• "MUTING" or "SLEEP" indications
• "VIDEO" mode
• "MAIN," "SAP" or "BOTH" modes
• "EXT-A" mode
• TIMER/BLOCK settings
Bar display
Indicates picture or sound level setting.
Press to open the panel.
POWER switch
STEREO indicator
TIMER indicator
VIDEO indicator
SLEEP indicator
Remote control detector
TV/VIDEO
VOLUME +
CHANNEL +
STEREO
TIMER
VIDEO
SLEEP
CHANNEL scan buttons
VOLUME buttons
TV/VIDEO button
BRIGHT (brightness) control
SHARPNESS control
MTS (Multichannel TV Sound) button
AUTO STEREO selector
VIDEO EXT-AUDIO selector
COLOR control
HUE control
PICTURE buttons
ERASE button
ADD button
VIDEO
EXT-AUDIO
ON OFF (MONO) AUTO STEREO
MTS
SHARPNESS
BRIGHT
COLOR
HUE
PICTURE
ERASE
ADD
ON OFF CABLE
TIMER/BLOCK
TIMER/BLOCK button
CABLE selector

Rear


VIDEO INPUT jack
AUDIO INPUT R/L jacks
AUX terminal
VIDEO
L (MONO)
AUDIO
R
VIDEO INPUT
VIDEO
MONITOR OUT
TV OUT
L
AUDIO
R
VIDEO OUTPUT
AUX
TO CONVERTER
VHF/UHF
VIDEO OUTPUT jack
MONITOR OUT/TV OUT selector
AUDIO OUTPUT R/L jacks
TO CONVERTER terminal
VHF/UHF antenna terminal

1-2. PRESETTING CHANNELS



Receivable channels of your set are:
VHF: 2-13
UHF: 14-69
Cable TV: 1-125
By adding and erasing channels, you can preset your TV so that only the desired channels appear, in numerical sequence, when CH (CHANNEL) + / – are pressed.

Preparation

1 Turn on the TV.
2 On-screen "EXT-A" indication should be off.
If not, set the EXT-AUDIO/VIDEO selector to VIDEO.
On-screen "VIDEO" indication and the VIDEO indicator should be off.
If not, press the TV/VIDEO button so that they disappear.
3 Set the CABLE ON/OFF selector according to the channel to be added or erased.
For cable TV channels, set to ON.
For VHF and UHF channels, set to OFF.

ADDING CHANNELS

1 Select the channel to be added by pressing the channel number buttons and ENTER button.
2 Press ADD.
A "+" indication will appear on the screen on the left of the channel number, indicating that the channel has been added.

Repeat steps **1** and **2** for other channels to be added.

ERASING CHANNELS

1 Select the channel to be erased.
2 Press ERASE.
A "–" indication will appear on the screen on the left of the channel number, indicating that the channel has been erased.

Repeat steps **1** and **2** for other channels to be erased.

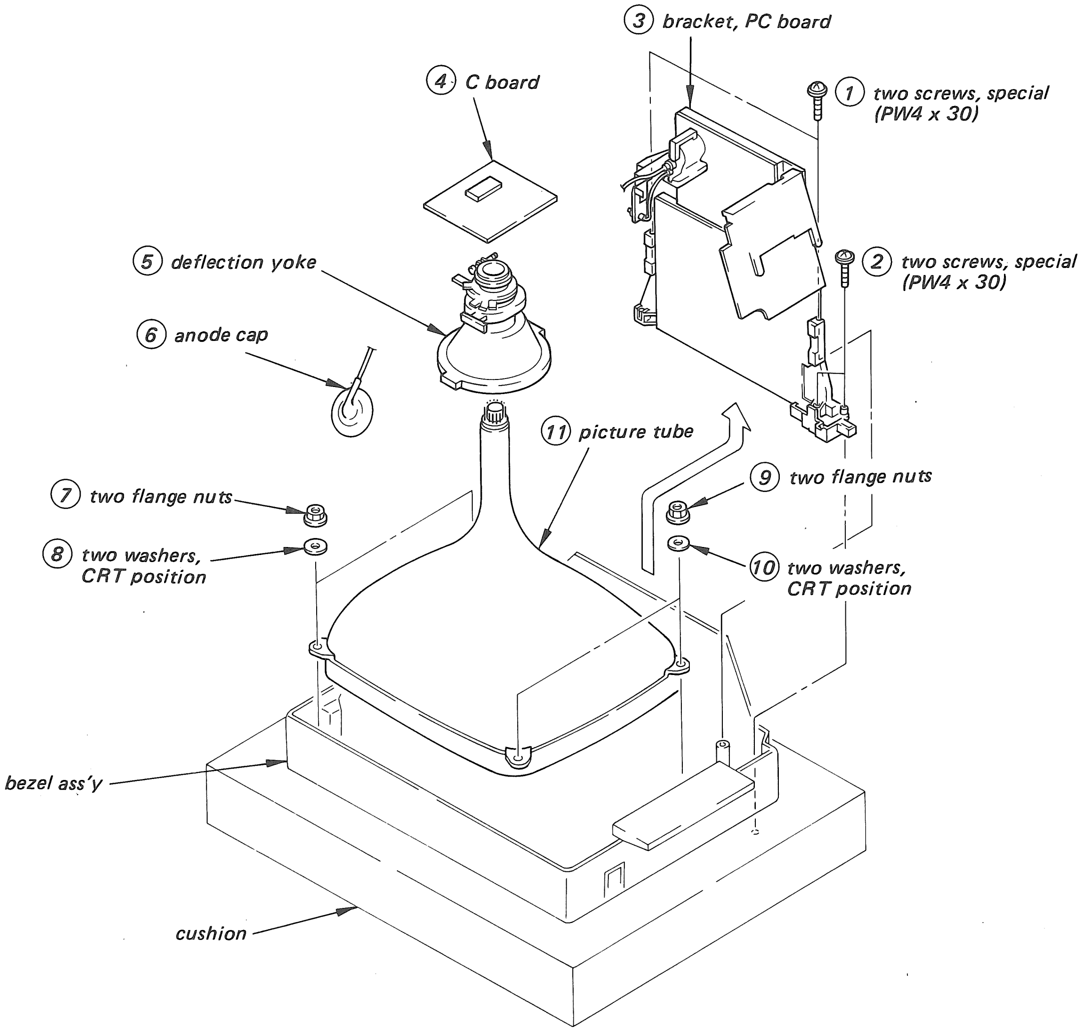
To add erased channels again, follow the steps for adding channels.

Note
If you erase a VHF or UHF channel, the cable TV channel with the same number will also be erased, and vice versa.

SECTION 2
DISASSEMBLY

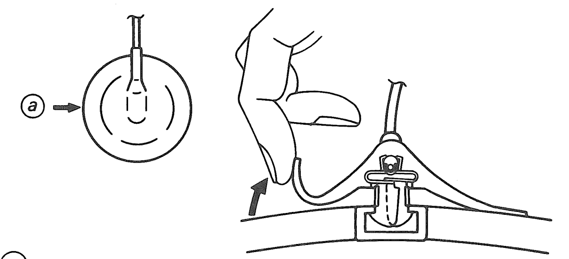
2-1. PICTURE TUBE REMOVAL

Note: *Follow the disassembly procedure in the numerical order given.*

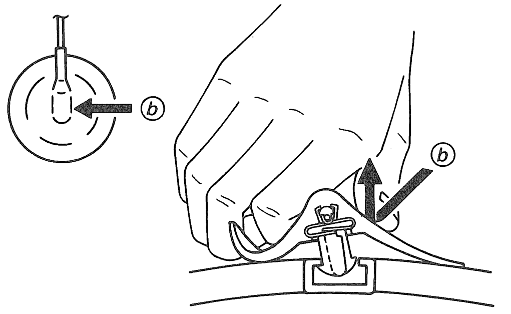

③ bracket, PC board
④ C board
① two screws, special (PW4 x 30)
② two screws, special (PW4 x 30)
⑤ deflection yoke
⑥ anode cap
⑪ picture tube
⑨ two flange nuts
⑦ two flange nuts
⑧ two washers, CRT position
⑩ two washers, CRT position
bezel ass'y
cushion

2-2. ANODE CAP REMOVAL

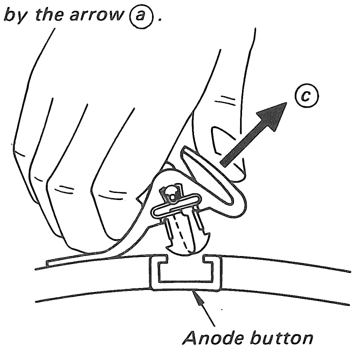
- **Removing Procedures**



① *Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.*



② *Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.*


ⓒ
Anode button

③ *When one side of the rubber cap is separated from the anode button, the anode cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.*

SECTION 3

CIRCUIT ADJUSTMENT

3-1. SAFETY RELATED ADJUSTMENTS

⧓ R513 CONFIRMATION METHOD (HOLD-DOWN COMFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with ◪ on the schematic diagram).
IC301, Q504, Q505, D504, D510, R515, R507, R513, R514, R517, R533, R537, R559, R526

(1) Preparation before confirmation

1. *Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHTNESS controls to maximum.*
2. *Confirm that the voltage of the TP-85 is more than 13 V dc when the set is operating normally with 120 V ac supply.*

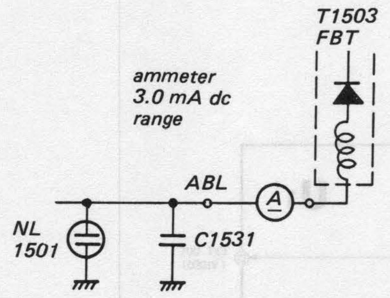
(2) Hold-down operation confirmation

1. *Turn the POWER switch ON, and receive entirely white signals and adjust ABL current to 1500 ±20 μA with PICTURE and BRIGHT etc controls.*
2. *Apply DC voltage of over 13.0 V gradually to the TP85 via 1T40 from the DC stavilized power source. Confirm that the minimum voltage is less than 17.50 V dc whereby the raster disappears during operation of hold-down circuit.*
   Note: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.
3. *Turn the POWER switch ON, and receive dot signals and adjust ABL current to 230 ±5 μA with PICTURE and BRIGHT etc controls.*
4. *Apply DC voltage of over 13.0 V gradually to TP85 via 1T40 from the DC stavilized power source. Confirm that the minimum voltage is less than 18.80 V dc whereby the raster disappears during operation of hold-down circuit.*
   Note: When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

(3) Hold-down readjustment
When step (2) is not satisfied, readjustment should be performed by altering the resistance value of R513 (a component marked with ⧓).

(4) Confirmation of hold-down erroneous operation

1. *Turn the POWER switch ON, and receive dot signals and set the PICTURE and BRIGHTNESS controls to minimum.*
2. *Confirm that the hold-down circuit does not operate by turning the POWER switch ON and OFF repeatedly several times.*
   Note: If the hold-down circuit starts operating in the above case, switch OFF the POWER of the set immediately.
3. *Turn the POWER switch ON, and receive dot signals and entirely white signals and set the PICTURE and BRIGHTNESS controls to maximum.*
4. *Confirm that the hold-down circuit does not operate by performing switchover of the channels of the dot signals and entirely white signals several times.*
   Note: If the hold-down circuit starts operating in the above case, switch OFF the POWER of the set immediately.
5. *If the above-mentioned steps 1 to 4 are not satisfied reconfirm steps (2) to (4) by altering the R513 smaller resistance value (a component marked with ⧓).*



** Use a digital multimeter whose input impedance is over 100 MΩ when confirming the voltage of TP85.*

CONFIRMATION WHEN REPLACING T1503 (FLYBACK TRANSFORMER)

The following adjustments should always be performed with reference to whether an X-ray radiation control circuit is connected or not, when replacing T1503 (FLYBACK TRANSFORMER).

** This check is to be performed when T1503 (FLYBACK TRANSFORMER) only is replaced, and has no relation to the hold-down circuit readjustment for replacement of parts marked ◪.*

(1) Connection confirmation

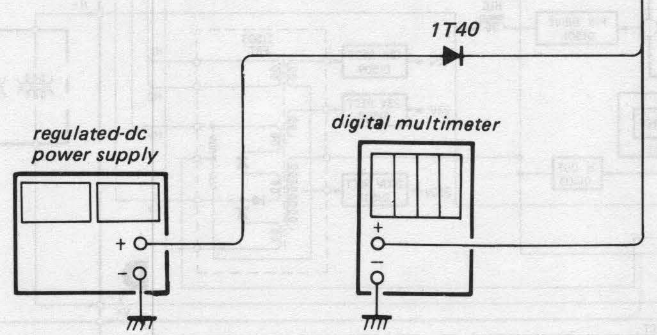
1. *Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHTNESS controls to maximum.*
2. *When the set is operating normally with 120 V ac supply, confirm the voltage of the TP85 is over 13 V dc.*

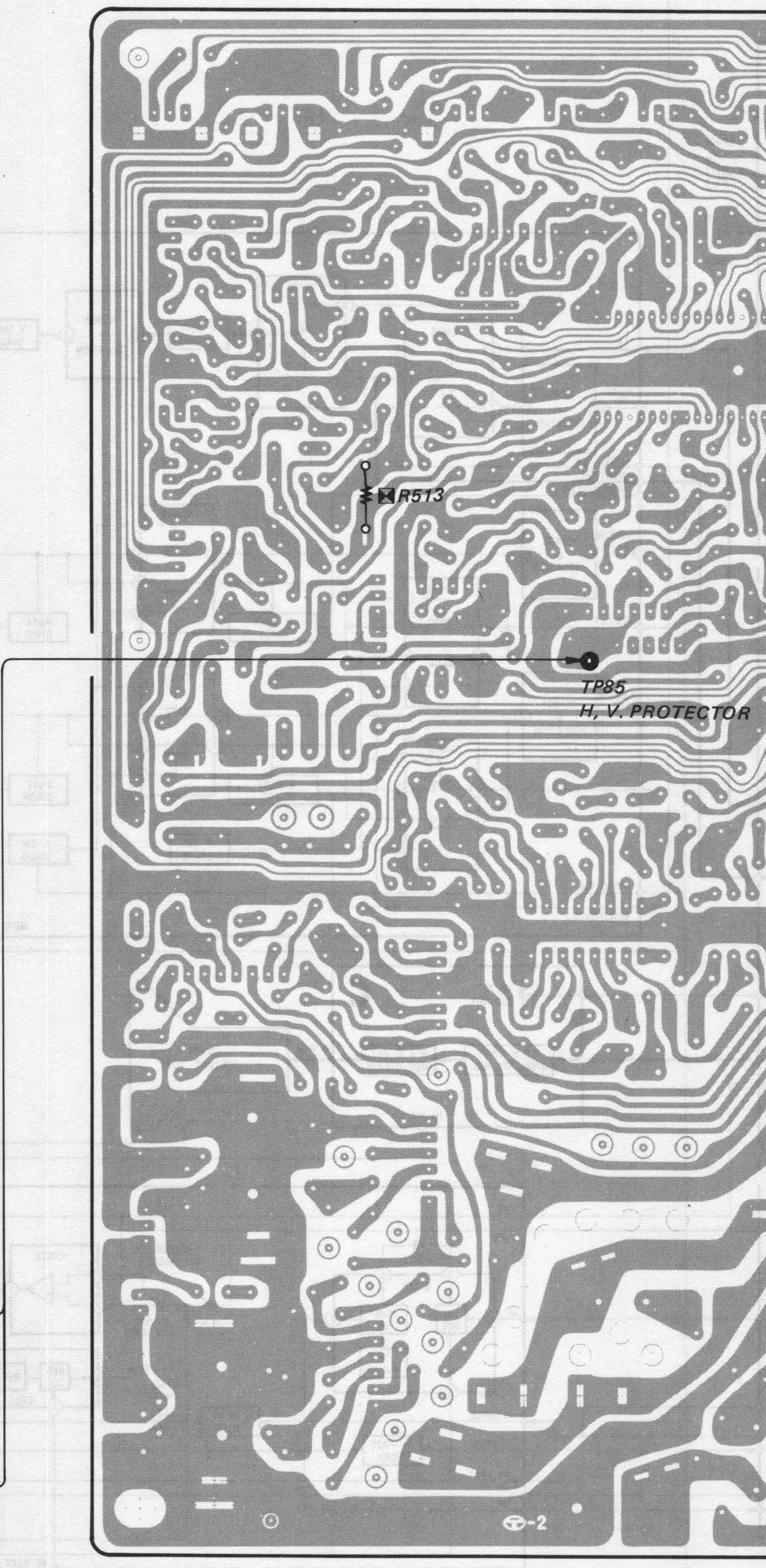
+B VOLTAGE CONFIRMATION

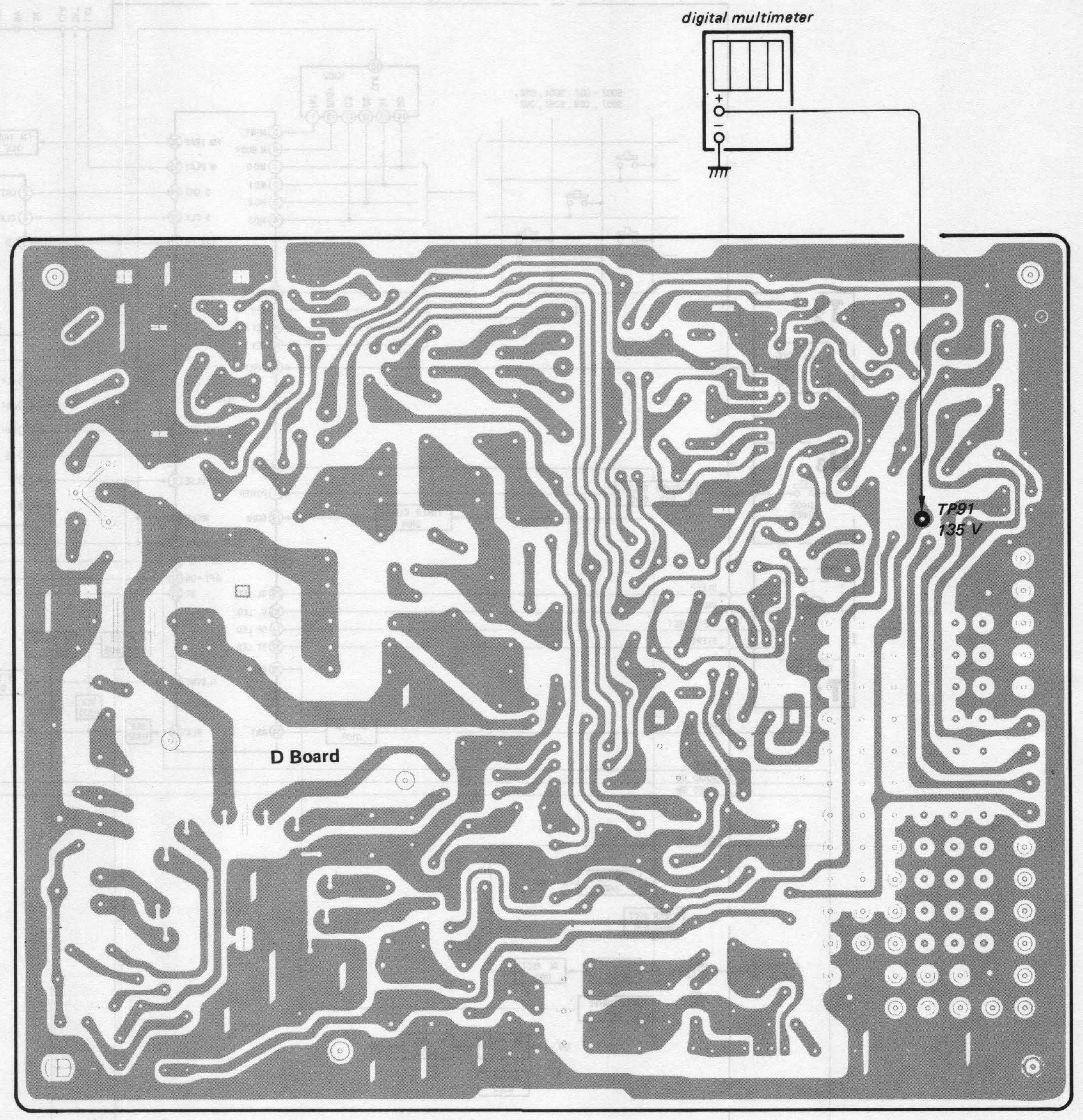
The following adjustments should always be performed when replacing IC651.

(1) The +B voltage confirmation

1. *Supply 130 $^{+1}_{-0}$ V ac to with variable auto-transformer.*
2. *Receive monoscope signals.*
3. *Set the PICTURE and BRIGHTNESS control to center.*
4. *Confirm the voltage of TP91 is less than 138.6 V dc.*
5. *If step 4 is not satisfied, replace IC651 and repeat above steps.*

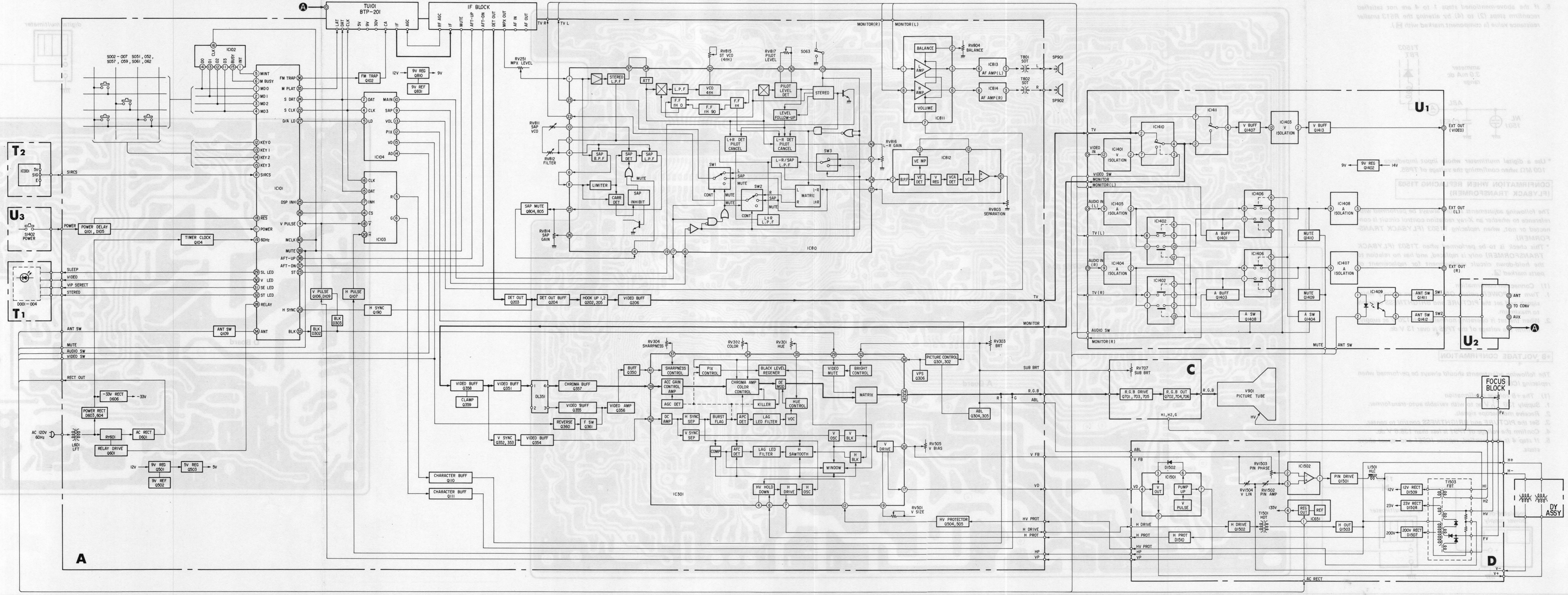






SECTION 4
DIAGRAM

4-1. BLOCK DIAGRAM


A
TU101
BTP-201
LAT
DAT
CLK
5V
9V
30V
CA
IF
AGC
IF BLOCK
RF AGC
MUTE
AFT-UP
AFT-DN
DET OUT
MPX OUT
AF IN
AF OUT
TV R
TV L
IC102
D0
D1
D2
D3
BUSY
INT
S002 - 007 S051, 052,
S057, 059, S061, 062
IC101
MINT
M BUSY
MD0
MD1
MD2
MD3
KEY 0
KEY 1
KEY 2
KEY 3
SIRCS
RES
POWER
60Hz
SL LED
V LED
SE LED
ST LED
RELAY
ANT
FM TRAP
M PLAT
S DAT
S CLK
D/A LD
DSP INH
V PULSE
MCLK
AFT-UP
AFT-DN
ST
H SYNC
BLK
FM TRAP
Q102
12V
9V REG
Q810
9V
9V REF
Q831
IC104
DAT
CLK
LD
MAIN
SAP
VOL
PIX
VD
AD
IC103
CLK
DAT
INH
CS
R
G
T2
IC001
5V
SIG
E
U3
S1402
POWER
POWER DELAY
Q101, D105
TIMER CLOCK
Q104
T1
D001 - 004
SLEEP
VIDEO
VIP SERECT
STEREO
ANT SW
ANT SW
Q109
V PULSE
Q106, D109
H PULSE
Q107
H SYNC
Q190
BLK
D303
BLK
D302
MUTE
AUDIO SW
VIDEO SW
RECT OUT
-33V RECT
D606
-33V
POWER RECT
D603, 604
AC 120V
60Hz
L601
LFT
RY601
AC RECT
D601
RELAY DRIVE
Q601
12V
9V REG
Q501
5V REG
Q503
5V
9V REF
Q502
CHARACTER BUFF
Q110
CHARACTER BUFF
Q111
RV251
MPX LEVEL
RV811
SAP
VCO
RV812
FILTER
SAP MUTE
Q804, 805
RV814
SAP
GAIN
STEREO
L.P.F
ATT
L.P.F
VCO
4fH
F.F
fH 0
F.F
fH 90
F.F
fH
RV815
ST VCO
(4fH)
RV817
PILOT
LEVEL
S063
PILOT
LEVEL
DET
STEREO
LEVEL
FOLLOW-UP
SAP
B.P.F
SAP
DET
SAP
L.P.F
MUTE
LIMITER
CARR
DET
SAP
INHIBIT
L+R DET
PILOT
CANCEL
L-R DET
PILOT
CANCEL
L-R/SAP
L.P.F
SW1
SW2
SW3
CONT
MUTE
MATRIX
L+R
L.P.F
IC801
RV816
L-R GAIN
MONITOR(R)
MONITOR(L)
BALANCE
L
AMP
R
AMP
VOLUME
IC811
RV804
BALANCE
IC813
AF AMP(L)
IC814
AF AMP(R)
T801
SOT
T802
SOT
SP901
SP902
IC812
VE MP
B.P.F
VE
DET
V
REG
VCA
DET
VCA
RV803
SEPARATION
DET OUT
Q203
DET OUT BUFF
Q204
HOOK UP 1, 2
Q202, 205
VIDEO BUFF
Q206
TV
MONITOR
VIDEO BUFF
Q358
CLAMP
Q359
VIDEO BUFF
Q351
DL351
CHROMA BUFF
Q357
VIDEO BUFF
Q355
VIDEO AMP
Q356
REVERSE
Q360
F SW
Q361
V SYNC
Q352, 353
VIDEO BUFF
Q354
BUFF
Q350
RV304
SHARPNESS
RV302
COLOR
RV301
HUE
SHARPNESS
CONTROL
PIX
CONTROL
BLACK LEVEL
REGENER
ACC GAIN
CONTROL
AMP
CHROMA AMP
COLOR
CONTROL
DE
MOD
AGC DET
KILLER
HUE
CONTROL
DC
AMP
H SYNC
SEP
BURST
FLAG
APC
DET
LAG
LED FILTER
VOC
V SYNC
SEP
V
OSC
V
BLK
COMP
AFC
DET
LAG LED
FILTER
H
SAWTOOTH
H
BLK
WINDOW
HV HOLD
DOWN
H
DRIVE
H
OSC
IC301
VIDEO
MUTE
BRIGHT
CONTROL
MATRIX
V
DRIVE
RV303
BRT
PICTURE CONTROL
Q301, 302
VPS
Q306
ABL
Q304, 305
RV505
V BIAS
RV501
V SIZE
HV PROTECTOR
Q504, 505
SUB BRT
R.G.B
R
G
ABL
V FB
VD
HV PROT
H DRIVE
H PROT
HP
VP
U1
IC1410
IC1411
V BUFF
Q1407
IC1403
V
ISOLATION
V BUFF
Q1413
EXT OUT
(VIDEO)
VIDEO
IN
IC1401
V
ISOLATION
VIDEO SW
MONITOR(L)
9V
9V REG
Q1402
14V
AUDIO IN
(L)
IC1405
A
ISOLATION
IC1406
IC1408
A
ISOLATION
EXT OUT
(L)
TV(L)
IC1402
A BUFF
Q1401
MUTE
Q1410
AUDIO IN
(R)
IC1404
A
ISOLATION
IC1407
A
ISOLATION
EXT OUT
(R)
TV(R)
A BUFF
Q1403
MUTE
Q1409
IC1409
ANT SW
Q1411
SW1
ANT SW
Q1412
SW2
ANT
TO CONV
AUX
A SW
Q1408
A SW
Q1404
AUDIO SW
MONITOR(R)
MUTE
ANT SW
U2
C
RV707
SUB BRT
R.G.B DRIVE
Q701, 703, 705
R.G.B OUT
Q702, 704, 706
V901
PICTURE TUBE
H1, H2, G
HV
FOCUS
BLOCK
G
FV
D
ABL
V FB
D1502
IC1501
VD
V
OUT
PUMP
UP
V
PULSE
RV1503
PIN PHASE
RV1504
V LIN
RV1502
PIN AMP
IC1502
PIN DRIVE
Q1501
L1501
HLC
135V
T1501
HDT
REG
OUT
REF
IC651
H DRIVE
Q1502
H PROT
D1510
H OUT
Q1503
12V
12V RECT
D1509
23V
23V RECT
D1508
200V
200V RECT
D1507
T1503
FBT
H+
H-
H1
H2
HV
FV
DY
ASSY
V-
V+
H DRIVE
H PROT
HV PROT
HP
VP
AC RECT

SONY
TRINITRON® COLOR TV
KV-2093R/RM-735

US Model
Chassis No. SCC-648V-A

P3 CHASSIS

SCHEMATIC DIAGRAM

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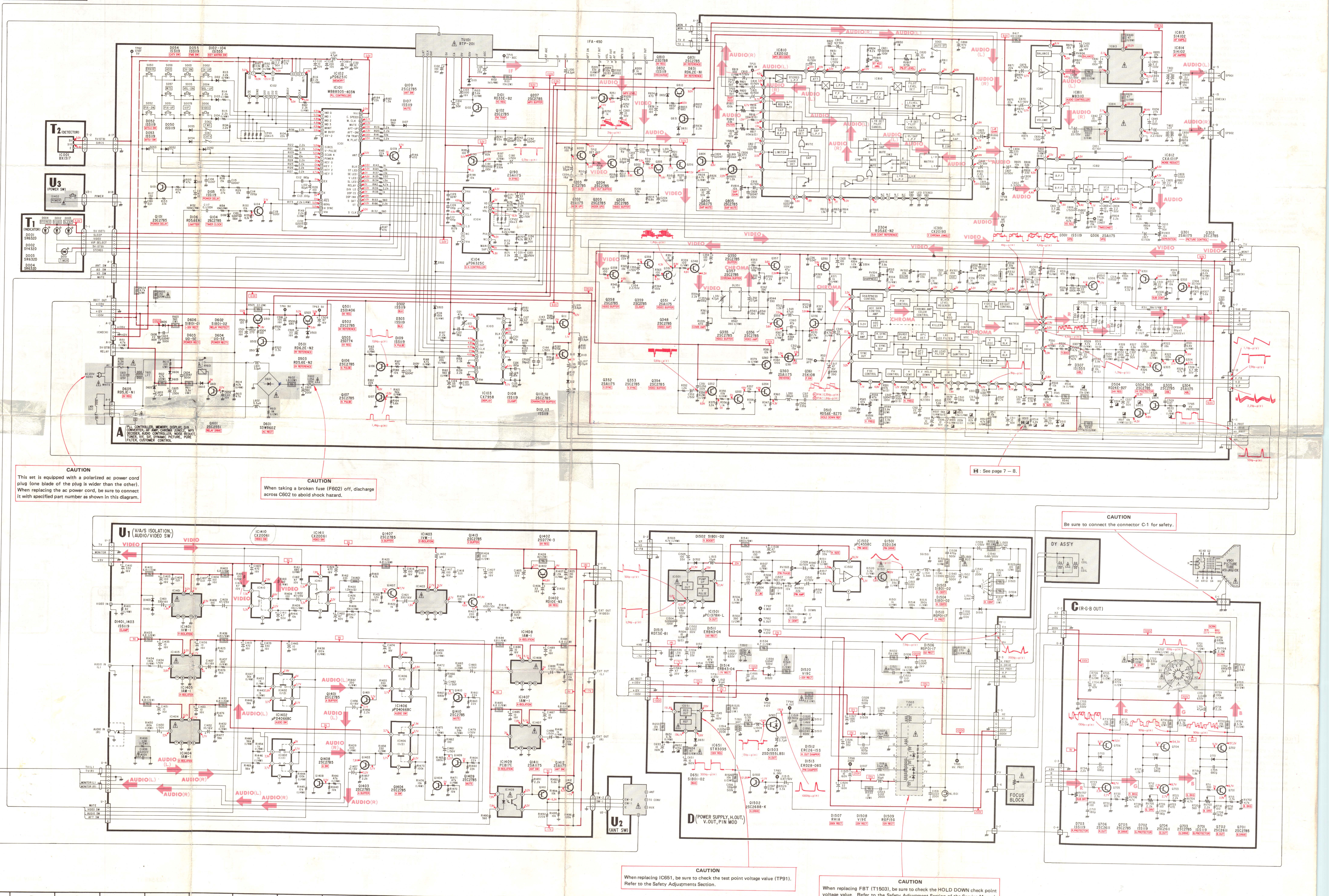
COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.


A (PLL CONTROLLER, MEMORY, DISPLAY, D/A CONVERTER, AF AMP, CHROMA JUNGLE, MPX DECODER, AUDIO CONTROLLER, NOISE REDUCT, TUNER, VIF, SIF, DYNAMIC PICTURE, PURE FILTER, CUSTOMER CONTROL)
T1 (INDICATOR)
T2 (DETECTOR)
U3 (POWER SW)
U1 (V/A/S ISOLATION, AUDIO/VIDEO SW)
U2 (ANT SW)
D (POWER SUPPLY, H.OUT, V.OUT, PIN MOD)
C (R·G·B OUT)
DY ASS'Y
V. COIL
H. COIL
FOCUS BLOCK
VIDEO
CHROMA
AUDIO (L)
AUDIO (R)

CAUTION

This set is equipped with a polarized ac power cord plug (one blade of the plug is wider than the other). When replacing the ac power cord, be sure to connect it with specified part number as shown in this diagram.

CAUTION

When taking a broken fuse (F602) off, discharge across C602 to aboid shock hazard.

⧗ : See page 7 – 8.

CAUTION

Be sure to connect the connector C-1 for safety.

CAUTION

When replacing IC651, be sure to check the test point voltage value (TP91). Refer to the Safety Adjustments Section.

CAUTION

When replacing FBT (T1503), be sure to check the HOLD DOWN check point voltage value. Refer to the Safety Adjustment Section of the Service Manual.

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, 1/6 W unless otherwise noted. k: 1000 Ω, M: 1000 kΩ
- ▭ : nonflammable resistor.
- ▭ : panel designation.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- The components identified by ⧗ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Select the resistance value according to SAFETY RELATED ADJUSTMENT.
- When replacing components identified by ◪, make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ⧗ and repeat the adjustment until the specified value is achieved. (Refer to R513 adjustment on page 7, 8.)
  When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (◪)	Adjustment (⧗)
D504, D510, IC301, Q504, Q505, R507, R513, R514, R515, R517, R526, R537, R533, R559	R513 adjustment

- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 MΩ digital multimeter.
- Readings are taken with a color-bar signal input.
- ▬ : B+ bus.
- ▬ ▬ : B– bus.
- Voltage variations may be noted due to normal production tolerances.
- ▭ : adjustment for repair.
- Voltages on A board are taken under conditions below.
  - ○ CH-13 (VHF HIGH) signal is received.
  - ○ VOLUME control is set to no sound position.
  - ○ PICTURE button is set to the normal position.
- The hold down check point is TP85.
- ⇨ : signal path.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- ※ : selected to yield optimum performance.

(KV-2093R/RM-735)

PRINTED WIRING BOARDS

Note: All mounting diagrams are viewed from conductor side.

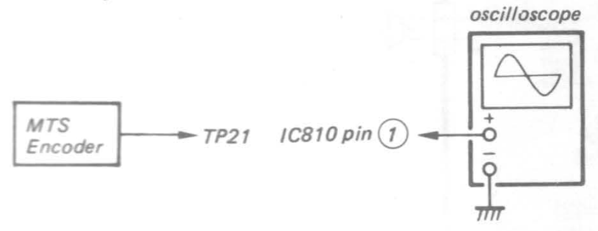
SIGNAL SET UP

V MAIN (L+R) signal	: *400 Hz, 247 mVrms (0.7 Vp-p) at TP21 100% modulation (±25 kHz deviation).*
V SUB (L−R) signal	: *400 Hz, 1.4 Vp-p (50 kHz deviation) at TP21.*
V SAP signal	: *400 Hz 100% modulation (±10 kHz deviation) 0.42 Vp-p at TP21.* *Carrier: 78.67 kHz (±15 kHz deviation)*
V ST signal	: *Carrier: 15.734 kHz, 0.14 Vp-p (±5 kHz deviation) at TP21.*

MPX OUT LEVEL

RV251 = H-12

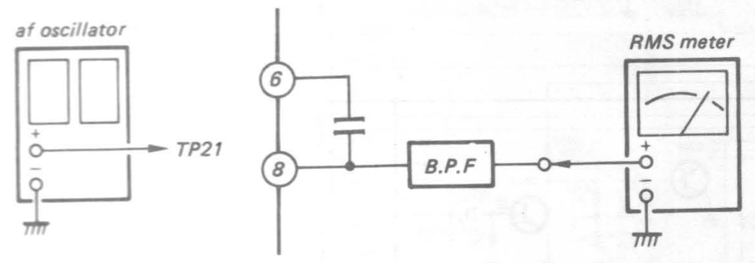
1. *Supply a V MAIN signal to TP21 (MPX IN) terminal.*
2. *Observe pin ① of IC810 with an oscilloscope.*
3. *Adjust RV251 (MPX LEVEL) for 0.7 ±0.03 Vp-p.*


oscilloscope
MTS Encoder
TP21
IC810 pin ①

SAP FILTER

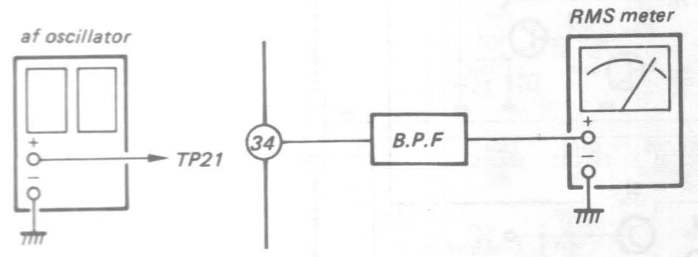
RV812 = F-8

1. *Supply a 62.94 kHz, 0.42 Vp-p sine wave signal to TP21 (MPX IN) terminal.*
2. *Connect the B.P.F (62.94 kHz) to pin ⑧ of IC810.*
3. *Adjust RV812 (SAP FILTER) to minimum.*


af oscillator
TP21
⑥
⑧
B.P.F
RMS meter

STEREO FILTER

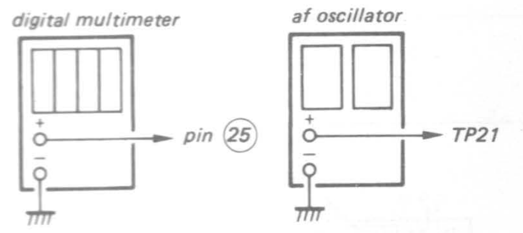
1. *Supply a 78.67 kHz, 0.42 Vp-p sine wave signal to TP21 (MPX IN) terminal.*
2. *Connect the B.P.F (78.67 kHz) and RMS meter to pin ㉞ of IC810.*
3. *Confirm that the on RMS meter is less than 30 mVrms.*


af oscillator
TP21
㉞
B.P.F
RMS meter

SAP VCO

RV811 = F-8

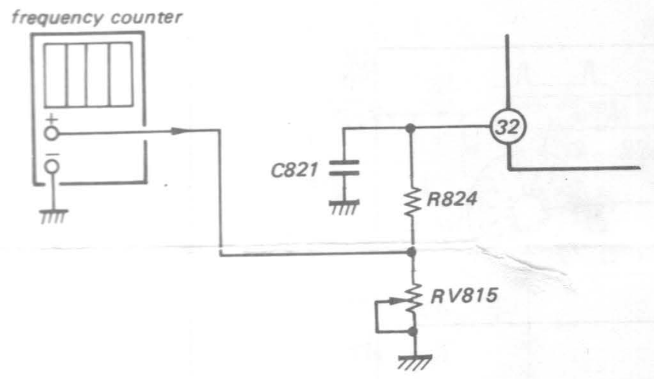
1. *Supply a 78.67 kHz, 0.42 Vp-p sine wave signal to TP21 (MPX IN) terminal.*
2. *Connect the pin ⑭ of IC810 and TP93.*
   At this point, let the DC current voltage to pin ㉕ of IC810 to become Va then, confirm that the Va at this point is Va = 3.4 ±0.3 V dc.
3. *Connect the pin ⑭ of IC810 and ground.*
   At this point, let the DC current voltage to pin ㉕ of IC810 to become Vb.
4. *Adjust RV811 (SAP VCO) so that Vb becomes.*
   Vb = Va ±0.1 V dc


digital multimeter
pin ㉕
af oscillator
TP21

STEREO VCO

RV815 = E-7

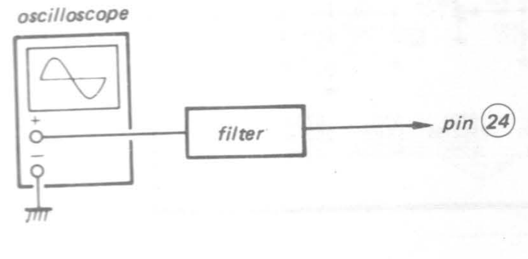
1. *Connect a 10 μF capacitor to TP21 (MPX IN) and ground.*
2. *Connect a frequency counter to the center tap of RV815 (ST VCO).*
3. *Adjust RV815 for 62.94 ±0.1 kHz frequency.*


frequency counter
C821
R824
RV815
㉜

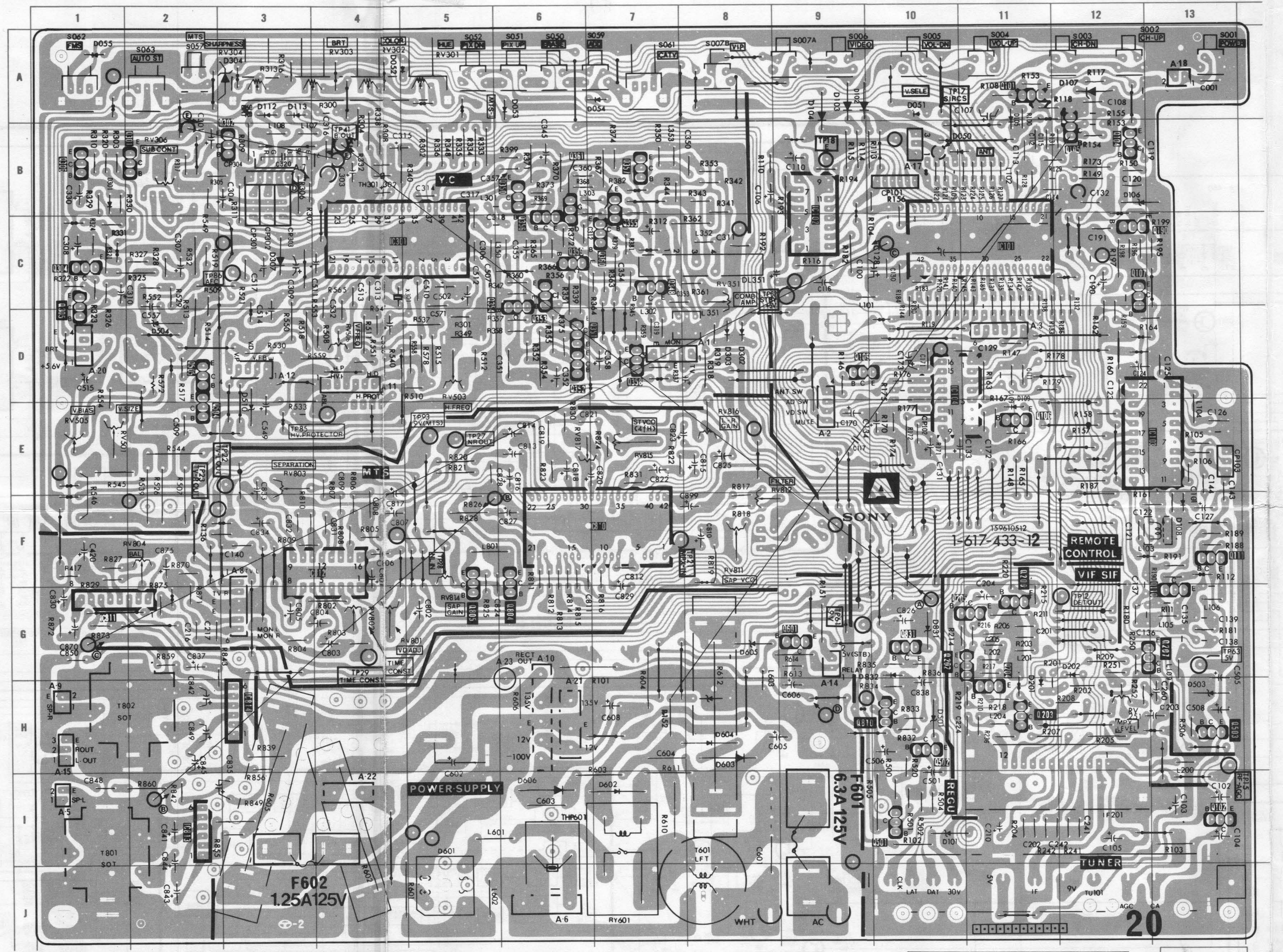
PILOT CANCEL ADJUSTMENT

RV817 = E-6

1. *Supply a VST signal to TP21 (MPX IN) terminal, set the DECODER into MAIN mode.*
2. *Adjust RV817 (PILOT CANCEL) so that the output from pin ㉔ of IC810 becomes minimum by observing it by observing it by using an oscilloscope and viewing it through a filter (f_H = 15.734 kHz Bandpass filter).*
3. *Confirm that the STEREO LED is lit.*


oscilloscope
filter
pin ㉔

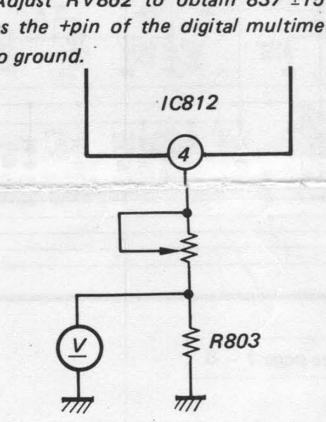
A [PLL CONTROLLER, MEMORY, DISPLAY, D/A CONVERTER, AF AMP, Y AMP, CHROMA JUNGLE, MPX DECODER, AUDIO CONTROLLER, NOISE REDUCT, TUNER, VIF, SIF, DYNAMIC PICTURE, PURE FILTER CUSTOMER CONTROL]


1 2 3 4 5 6 7 8 9 10 11 12 13
A B C D E F G H I J
SONY
1-617-433-12
REMOTE CONTROL
VIF SIF
POWER SUPPLY
F601 6.3A125V
F602 1.25A125V
TUNER
20

NOISE REDUCTION TIME CONSTANT

RV802 = G-4

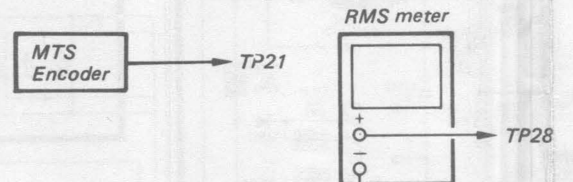
1. *Adjust RV802 to obtain 837 ±15 mV, with connecting as the +pin of the digital multimeter to R803 and −pin to ground.*


IC812
④
V
R803

SAP LEVEL

RV814 = F-5

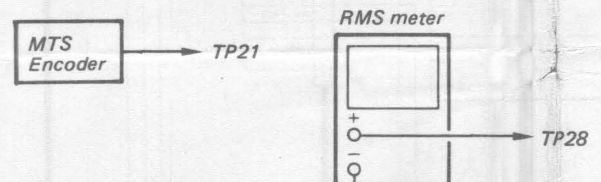
1. *Receives a composit signal.*
   (SUB SAP signal and STEREO PILOT signal) from a MTS ENCODER to TP21 (MPX IN) terminal.
2. *Set the SAP mode.*
3. *Connect the RMS meter to TP28 (NR IN).*
4. *Adjust RV814 for 489 ±15 mVrms.*


MTS Encoder
TP21
RMS meter
TP28

(L-R) LEVEL

RV816 = E-8

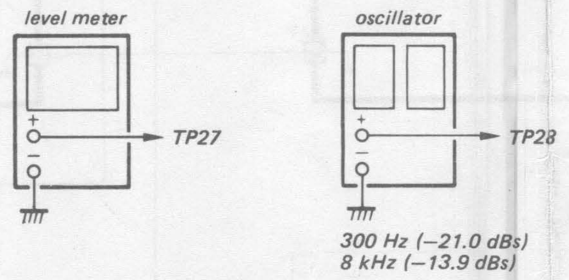
1. *Receives a composite signal.*
   (SUB SAP signal and STEREO PILOT signal) from a MTS ENCODER to TP21 (MPX IN) terminal.
2. *Set the MAIN mode.*
3. *Connect RMS meter to TP28 (NR IN).*
4. *Adjust RV816 for 489 ±15 mVrms.*


MTS Encoder
TP21
RMS meter
TP28

PRE-VARIABLE DE-EMPHASIS ADJUSTMENT

RV801 = G-4

1. *Open pin ㉔ of IC810.*
2. *Input sine wave of 300 Hz, −21.0 dBs with TP28 (NR IN).*
   At this point, let the level of TP27 (NR OUT) to become V1.
3. *Input sine wave of 8 kHz, −13.9 dBs with TP28 (NR IN) in a similar as step 2.*
   At this point, let the level of TP27 (NR OUT) to become V2.
4. *Adjust RV801 (VD ADJ) so that the relationship between V1 and V2 becoems V2 = V1 − (11.3 ±0.3) dBs.*

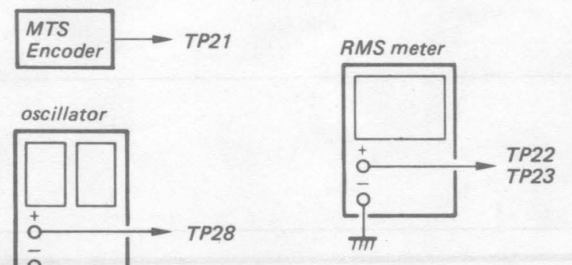

level meter
TP27
oscillator
TP28

300 Hz (−21.0 dBs)
8 kHz (−13.9 dBs)

PRE-SEPARATION ADJUSTMENT

RV803 = E-3

1. *Supply a V MAIN signal to TP21 (MPX IN) terminal.*
2. *Set the DECODER into MAIN mode.*
3. *At this point, read the level to TP23 (IC OUT (R)) and let it to become VL. Then, confirm that VL is 480 ±48 mVrms.*
4. *Supply a VST signal to TP21 (MPX IN) terminal. Stop the input of V MAIN which has been input previously. Keep the DECODER into MAIN mode.*
5. *As in the similar procedure of the Variable De-emphasis adjustment, input sine wave of 300 Hz, −18.0 dBs with TP28 (NR IN).*
6. *At this point, when the level of TP22 (IC OUT (L)) is assumed to be VR, adjust RV803 (SEPARATION) so that VR = VL x 1/4 ±3.0 mVrms is obtained.*


MTS Encoder
TP21
oscillator
TP28
RMS meter
TP22
TP23

RF AGC ADJUSTMENT

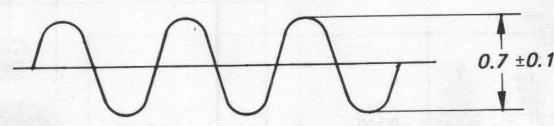
IFA-450 = I-12

1. *Turn in an off-air signal.*
2. *Adjust AGC VR (AGC VR of IFA-450) so that snow noise and cross-modulation just disapper from the picture.*

MPX LEVEL ADJUSTMENT

RV251 = H-12

1. *Receive 400 Hz (100% modulation) sound signal.*
2. *Connect an oscilloscope to Ⓔ of Q207.*
3. *Adjust RV251 so that the MPX level is 0.7 ±0.1 Vp-p.*



H. FREQ ADJUSTMENT

RV503 = D-5

1. *Receive a color-bar signal.*
2. *Connect the digital multi-meter across TP-86 and ground.*
3. *Adjust RV503 so that voltage of TP-86 is 3.2 ±0.1 V dc.*

V. FREQ ADJUSTMENT

RV506 = D-4

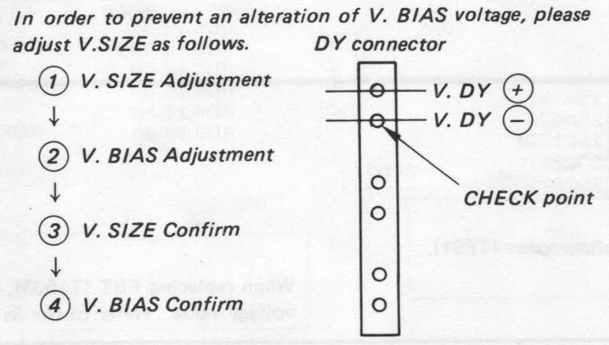
1. *Set at VIDEO mode and receive no signal.*
2. *Connect frequency counter across pin ③ of A-12 connector and ground.*
3. *Adjust RV506 for 55 ±0.3 Hz on the frequency counter.*

V. BIAS ADJUSTMENT

RV505 = E-1

1. *Receive a color-bar signal.*
2. *Connect the digital multi-meter across DY connector (V. DY ⊖) and ground.*
3. *Adjust RV505 so that voltage is 16.5 ±0.1 V dc.*

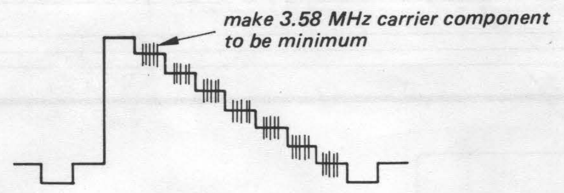
Note:
In order to prevent an alteration of V. BIAS voltage, please adjust V.SIZE as follows.


DY connector
① V. SIZE Adjustment
↓
② V. BIAS Adjustment
↓
③ V. SIZE Confirm
↓
④ V. BIAS Confirm
V. DY ⊕
V. DY ⊖
CHECK point

COMB TYPE FILTER ADJUSTMENT

RV351 = C-8
L351 = D-8

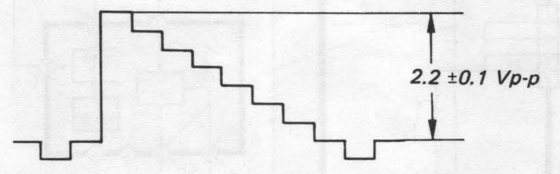
1. *Set at TV mode and receive a color-bar signal.*
2. *Connect an oscilloscope to the pin ④ of A-7 connector (blue out).*
3. *Adjust RV351 and L351 taking tracking, so as the chroma component of the waveform to becomes minimum.*


make 3.58 MHz carrier component to be minimum

SUB CONTRAST ADJUSTMENT

RV306 = B-2

1. *Receive a color-bar signal.*
   PICTURE . . . . . . MAX
   BRIGHT . . . . Click position
   COLOR . . . . MIN
2. *Short-circuit between Ⓒ of Q305 and ground with a jumper wire.*
3. *Connect an oscilloscope to the pin ④ of A-7 connector (blue out).*
4. *Adjust RV306 (SUB CONT) so that voltage is 2.2 ±0.1 Vp-p.*



INDICATOR POSITION ADJUSTMENT

L103 = F-13

1. *Receive a color-bar signal.*
   PICTURE . . . . . . MAX
   BRIGHT . . . . Click position
2. *Press the PICTURE button until this picture level becomes maximum.*
3. *Adjust L103 as show in Fig. 1.*

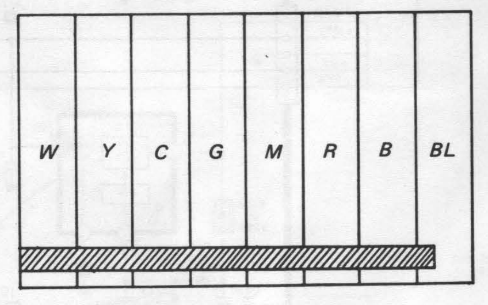
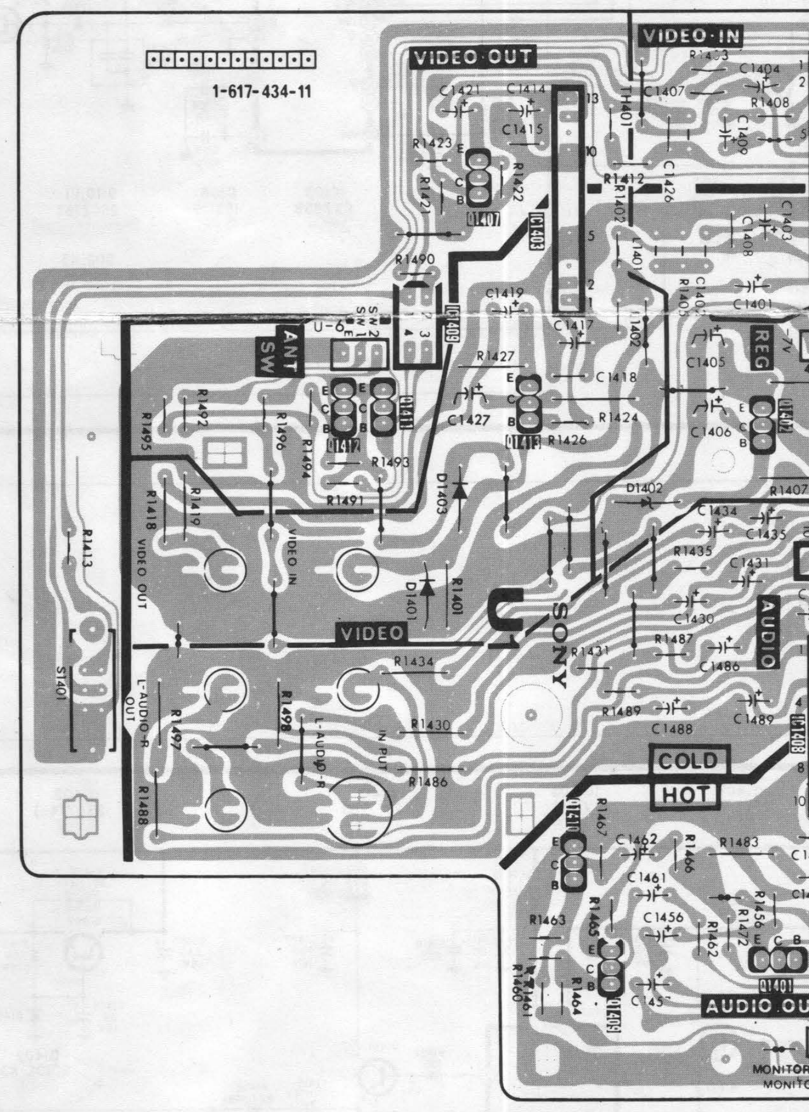


Fig. 1

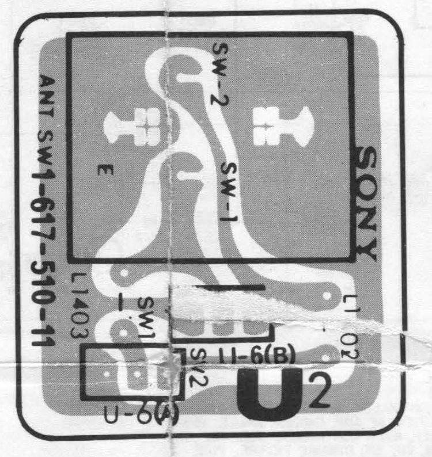
A

CONNECTOR	
A1	D-7
A2	E-9
A5	I-1
A6	J-6
A7	B-3
A8	G-3
A9	H-1
A10	H-6
A11	D-4
A12	D-3
A14	G-9
A15	H-1
A18	A-13
A20	D-1
CAPACITOR	
C001	A-13
C100	C-9
C101	E-13
C102	I-13
C103	I-13
C104	I-13
C105	I-12
C106	B-8
C107	A-11
C108	A-12
C109	D-11
C110	B-9
C111	D-11
C112	B-11
C113	B-11
C114	B-11
C115	B-11
C116	C-9
C117	E-9
C119	B-12
C120	B-12
C121	F-12
C122	F-12
C123	D-12
C124	D-12
C125	D-13
C126	E-13
C127	F-13
C129	D-10
C130	C-10
C131	E-10
C132	B-12
C133	E-10
C134	E-10
C143	F-13
C144	E-13
C170	E-9
C171	D-10
C172	E-11
C173	D-10
C190	C-12
C191	C-12
C201	G-11
C202	I-11
C203	H-13
C204	G-11
C205	G-11
C224	H-10
C241	I-12
C242	I-11
C260	H-13
C301	B-2
C302	B-4
C303	B-4
C304	B-3
C306	C-5
C307	C-2
C308	C-1
C309	C-3
C310	C-1
C311	C-8
C312	C-6
C313	C-4
C314	B-5
C315	B-4
C316	B-4
C317	C-5
C320	B-3
C330	B-1
C345	B-6
C350	B-8
C351	D-6
C352	D-6
C353	C-7
C354	C-7
C355	C-6
C357	B-6
C358	D-7
C360	B-6
C420	F-1
C501	I-10
C502	C-5
C505	H-13
C506	H-10
C507	C-5
C508	H-13
C509	E-2
C510	C-5
C5111	C-4
C512	C-5
C513	C-4
C514	D-3
C517	C-3
C532	D-4
C536	D-4
C549	E-3
C557	C-2
C571	C-5
C601	I-8
C602	H-5
C603	I-6
C604	H-7
C605	H-8
C606	H-9
C608	H-7
C801	F-4
C802	G-5
C803	G-4
C804	G-4
C805	G-3
C806	F-4
C807	F-4
C808	F-4
C809	F-4
C810	F-8
C811	F-6
C812	F-7
C813	E-6
C814	E-6
C815	E-8
C816	E-6
C817	F-4
C818	E-6
C819	E-6
C820	E-7
C821	E-6
C822	E-7
C823	E-8
C824	G-5
C825	E-8
C826	G-10
C827	F-6
C828	E-5
C829	G-7
C830	G-1
C831	F-4
C832	F-3
C833	E-3
C834	F-3
C835	I-3
C837	G-2
C838	H-10
C841	I-2
C842	H-2
C843	J-2
C844	I-2
C845	H-2
C848	I-1
C849	H-2
C850	G-1
C870	G-1
C875	F-2
C899	F-8
DIODE	
D050	B-10
D052	A-5
D053	A-6
D054	A-7
D055	A-1
D101	I-10
D102	A-9
D103	A-9
D104	A-9
D105	B-11
D106	B-12
D107	A-12
D108	F-13
D109	E-11
D112	A-3
D113	A-3
D301	B-1
D302	D-8
D303	D-8
D304	A-3
D307	C-3
D501	H-10
D503	H-13
D504	D-2
D510	E-3
D601	J-5
D602	I-7
D603	H-8
D604	H-8
D605	G-8
D606	I-6
D831	G-10
D832	G-10
DELAY LINE	
DL351	C-8
FUSE	
F601	I-9
F602	I-3
IC	
IC101	C-11
IC102	C-9
IC103	E-13
IC104	D-10
IC301	C-4
IC810	F-7
IC811	G-1
IC812	F-4
IC813	I-2
IC814	H-3
COIL	
L101	C-9
L102	B-11
L103	F-13
L104	E-13
L105	G-13
L106	G-13
L107	B-3
L108	B-3
L109	G-13
L200	H-13
L201	G-11
L202	G-11
L204	H-11
L303	B-7
L350	C-6
L351	D-8
L352	C-8
L353	B-7
L601	I-5
L602	J-5
L603	H-8
L801	F-5
TRANSISTOR	
Q101	A-11
Q102	I-13
Q104	B-12
Q106	E-11
Q107	C-12
Q109	D-9
Q110	G-13
Q111	F-13
Q190	C-12
Q202	G-10
Q203	H-11
Q204	H-11
Q205	G-11
Q206	G-11
Q207	G-12
Q301	B-2
Q302	B-3
Q304	C-1
Q305	C-1
Q306	B-1
Q348	C-7
Q350	B-6
Q351	D-6
Q352	D-6
Q353	C-6
Q354	C-6
Q355	B-7
Q356	C-6
Q357	B-7
Q358	D-7
Q359	C-6
Q360	C-7
Q361	B-6
Q501	I-10
Q502	H-10
Q503	H-13
Q504	E-2
Q505	D-2
Q601	G-9
Q804	G-6
Q805	G-5
Q810	H-10
Q831	G-10
RESISTOR	
R100	B-11
R101	G-6
R102	I-10
R103	I-13
R104	B-10
R105	E-13
R106	E-13
R108	A-11
R109	B-10
R110	B-8
R113	B-10
R114	B-9
R115	B-9
R116	C-9
R117	A-12
R118	A-11
R119	D-10
R120	D-10
R121	B-10
R122	B-10
R123	B-11
R124	B-11
R125	B-11
R126	B-11
R127	B-11
R128	B-11
R129	B-11
R131	B-12
R132	D-12
R133	D-11
R134	D-11
R135	D-11
R137	D-11
R138	D-11
R139	D-11
R140	D-10
R141	D-10
R142	D-11
R143	D-11
R144	D-10
R145	D-11
R146	D-9
R147	D-11
R148	E-11
R149	B-12
R150	B-12
R151	G-9
R152	H-7
R153	A-11
R154	B-12
R155	A-12
R156	C-10
R157	E-12
R158	E-12
R159	D-12
R160	D-12
R161	F-13
R162	D-12
R163	D-11
R164	D-13
R165	E-11
R166	E-11
R167	E-11
R170	E-10
R171	E-10
R172	E-10
R173	B-12
R174	E-10
R175	D-10
R176	D-10
R177	E-10
R179	D-11
R180	G-12
R181	G-13
R182	C-9
R183	C-10
R184	C-10
R185	D-11
R186	D-12
R187	E-12
R188	F-13
R189	F-13
R190	F-13
R191	F-13
R192	C-8
R193	B-9
R194	B-9
R195	C-13
R196	C-12
R197	C-12
R198	C-12
R199	C-13
R203	G-11
R204	I-11
R205	H-12
R206	G-11
R209	G-12
R210	H-11
R211	G-11
R214	G-10
R215	G-11
R216	G-11
R217	G-11
R218	H-11
R219	H-10
R220	F-111
R236	H-11
R241	I-12
R242	I-11
R250	G-12
R251	G-12
R252	H-12
R301	D-5
R302	B-5
R303	B-1
R304	B-4
R305	B-2
R306	B-3
R307	B-3
R308	B-4
R309	B-3
R310	B-1
R311	B-3
R312	B-7
R313	A-3
R316	A-3
R317	B-2
R318	D-8
R319	D-8
R320	B-1
R321	C-1
R322	C-1
R323	C-1
R324	C-1
R325	C-2
R326	C-1
R327	C-2
R328	C-2
R329	B-1
R330	B-1
R331	C-1
R332	B-4
R333	B-5
R334	B-5
R335	B-5
R336	B-5
R337	D-7
R338	B-4
R339	C-6
R340	B-4
R341	B-8
R342	B-8
R343	B-8
R344	B-7
R345	C-7
R347	C-6
R348	B-5
R350	B-7
R351	C-6
R352	D-6
R353	B-8
R354	D-6
R355	D-6
R356	C-6
R357	D-6
R358	D-6
R359	D-7
R360	C-6
R361	C-8
R362	C-8
R363	C-7
R364	C-7
R365	C-6
R366	C-6
R367	B-7
R368	B-6
R369	B-6
R370	B-6
R371	B-6
R372	C-6
R373	B-6
R374	B-7
R375	D-6
R379	C-7
R381	C-7
R382	B-7
R399	B-6
R417	F-1
R500	I-10
R501	I-10
R502	I-10
R504	I-10
R505	I-10
R506	H-13
R507	E-2
R508	D-4
R509	C-2
R510	D-5
R511	D-4
R512	D-5
R513	D-2
R514	C-2
R515	D-5
R517	D-2
R518	D-3
R519	C-2
R520	H-10
R521	C-3
R526	E-2
R529	C-2
R530	D-3
R532	C-2
R533	E-3
R537	D-5
R539	E-2
R540	D-4
R544	E-2
R545	E-1
R546	E-1
R547	D-4
R549	B-2
R550	D-3
R551	D-4
R552	C-2
R553	C-4
R554	D-1
R558	D-5
R559	D-4
R565	C-4
R572	D-2
R578	D-5
R601	J-4
R602	I-4
R603	I-7
R604	G-7
R605	I-3
R610	I-7
R611	I-7
R612	H-8
R613	G-9
R614	G-9
R802	G-4
R803	G-4
R804	G-3
R805	F-4
R806	F-4
R807	E-4
R808	F-4
R809	F-3
R810	F-3
R811	F-6
R812	F-6
R813	F-6
R814	F-6
R815	F-6
R816	F-7
R817	F-8
R818	F-8
R819	F-8
R820	E-5
R821	E-5
R822	E-7
R823	E-6
R824	E-7
R825	G-5
R826	F-5
R827	F-1
R828	F-5
R829	F-1
R830	E-6
R831	E-7
R832	H-10
R833	H-10
R834	H-10
R835	G-10
R836	G-10
R839	H-3
R842	I-1
R843	H-2
R849	I-3
R855	I-3
R856	I-3
R859	G-2
R860	I-2
R870	F-2
R871	G-2
R872	G-1
R873	G-1
R875	G-2
VARIABLE RESISTOR	
RV251	H-12
RV301	A-5
RV302	A-4
RV303	A-3
RV304	A-3
RV306	B-2
RV351	C-8
RV501	E-1
RV503	D-5
RV505	E-1
RV506	D-4
RV801	G-4
RV802	G-4
RV803	E-3
RV804	F-2
RV811	F-8
RV812	F-8
RV814	F-5
RV815	E-7
RV816	E-8
RV817	E-6
RELAY	
RY601	I-7
SWITCH	
S002	A-12
S003	A-12
S004	A 11
S005	A-10
S006	A-9
S007B	A-8
S050	A-6
S051	A-6
S052	A-5
S057	A 2
S059	A-7
S061	A-7
S062	A 1
S063	A-2
TRANSFORMER	
T601	J-8
T801	I-1
T802	H-1
THERMISTOR	
TH301	B-4
THP601	I 6
CRYSTAL	
X301	C-4

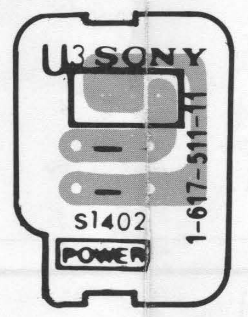
U1 [V/A/S ISOLATION, AUDIO/VIDEO SW]


1-617-434-11
VIDEO OUT
VIDEO IN
VIDEO SW
VIDEO
COLD
HOT
AUDIO OUT
AUDIO SW

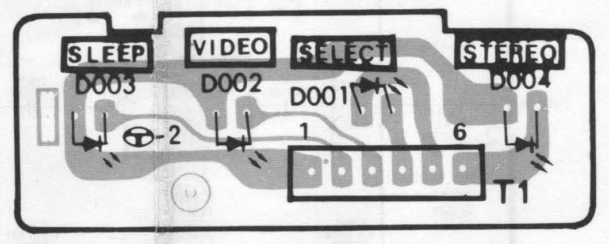
U2 [ANT SW]


ANT SW 1-617-510-11
SONY
U2

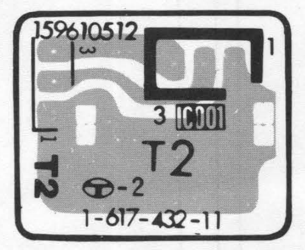
U3 [POWER SW]


SONY
1-617-511-11
S1402
POWER

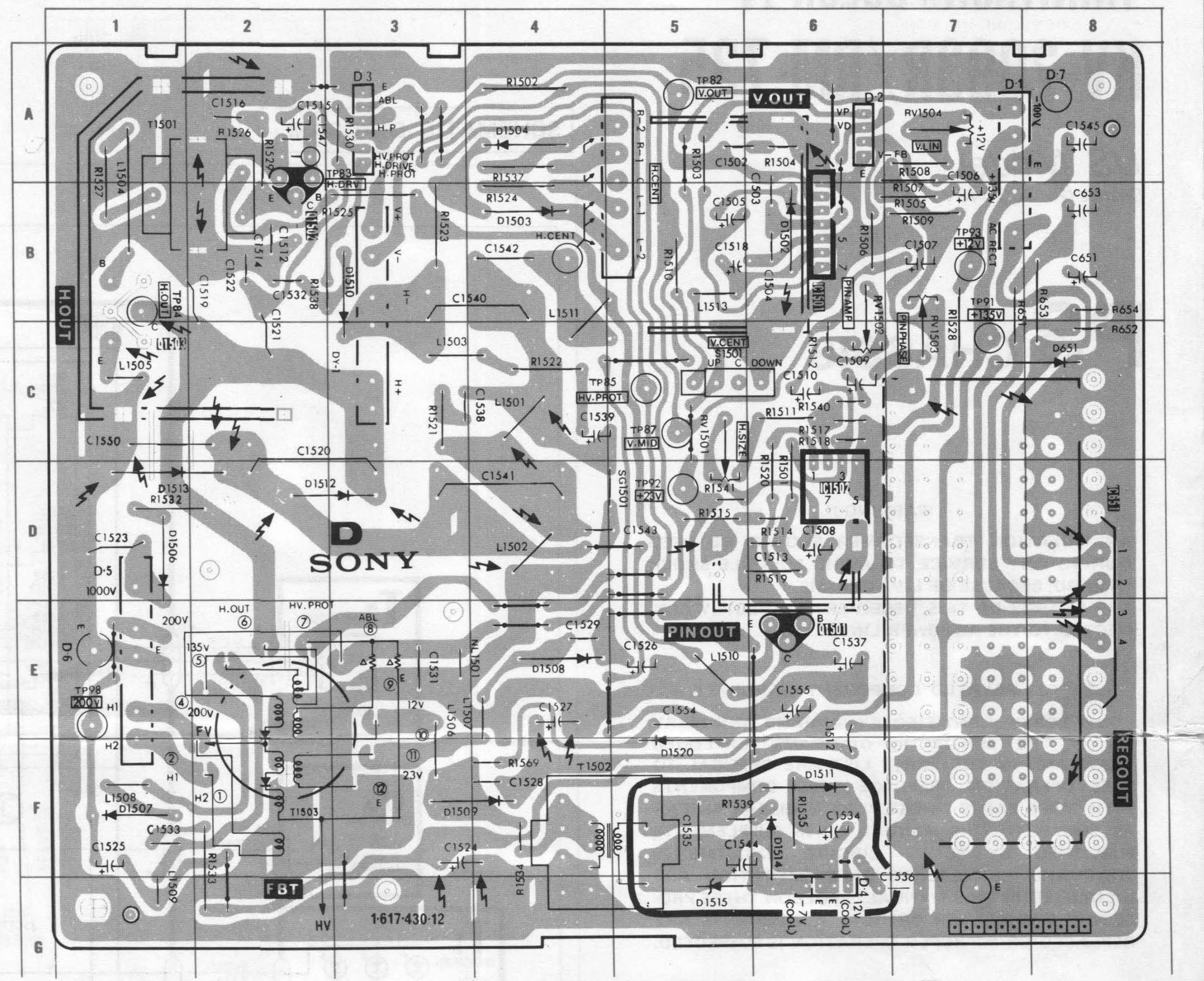
T1 [INDICATOR]


SLEEP
VIDEO
SELECT
STEREO
D003
D002
D001
D004
T1

T2 [DETECTOR]


T2
1-617-432-11

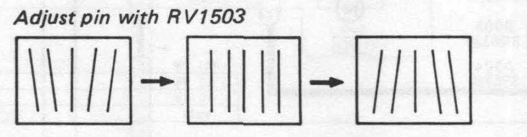
D [POWER SUPPLY, V. OUT, PIN MOD, H. OUT]


1 2 3 4 5 6 7 8
A B C D E F G
V.OUT
H.OUT
SONY
PIN OUT
FBT
HV
1-617-430-12

PIN PHASE ADJUSTMENT

RV1503 = C-7

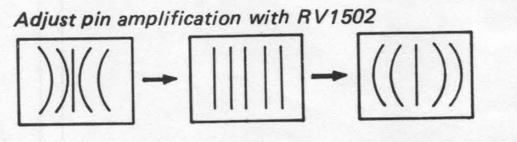
Adjust pin with RV1503



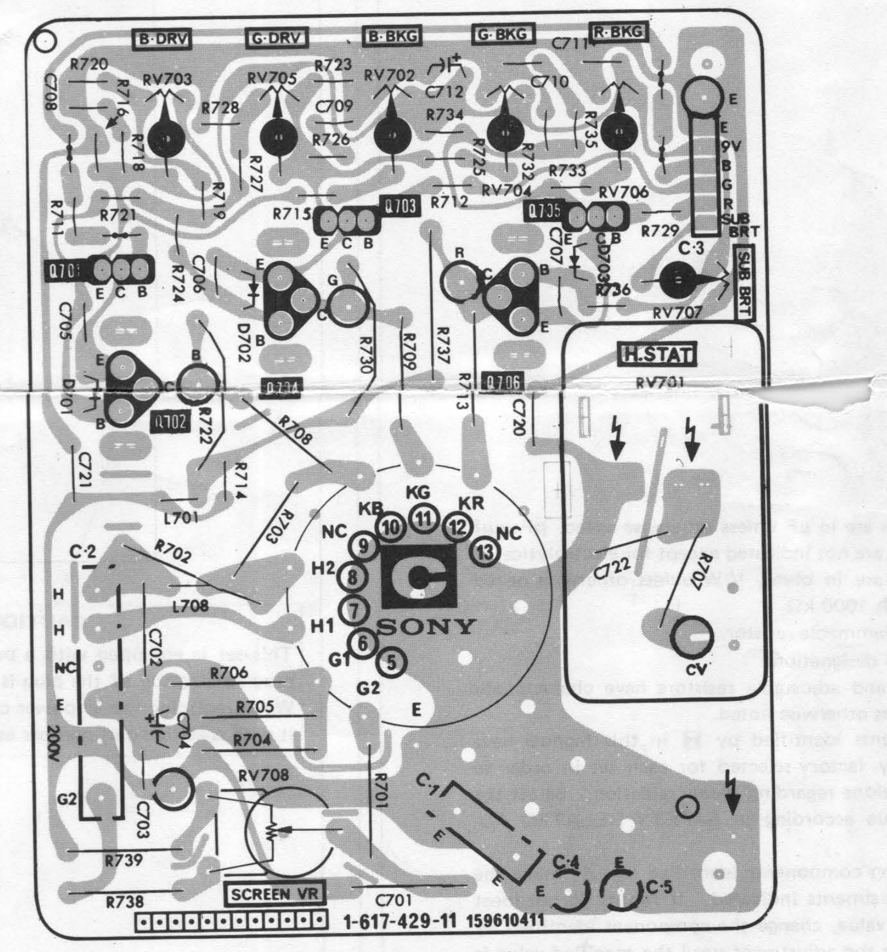
PIN AMP ADJUSTMENT

RV1502 = B-6

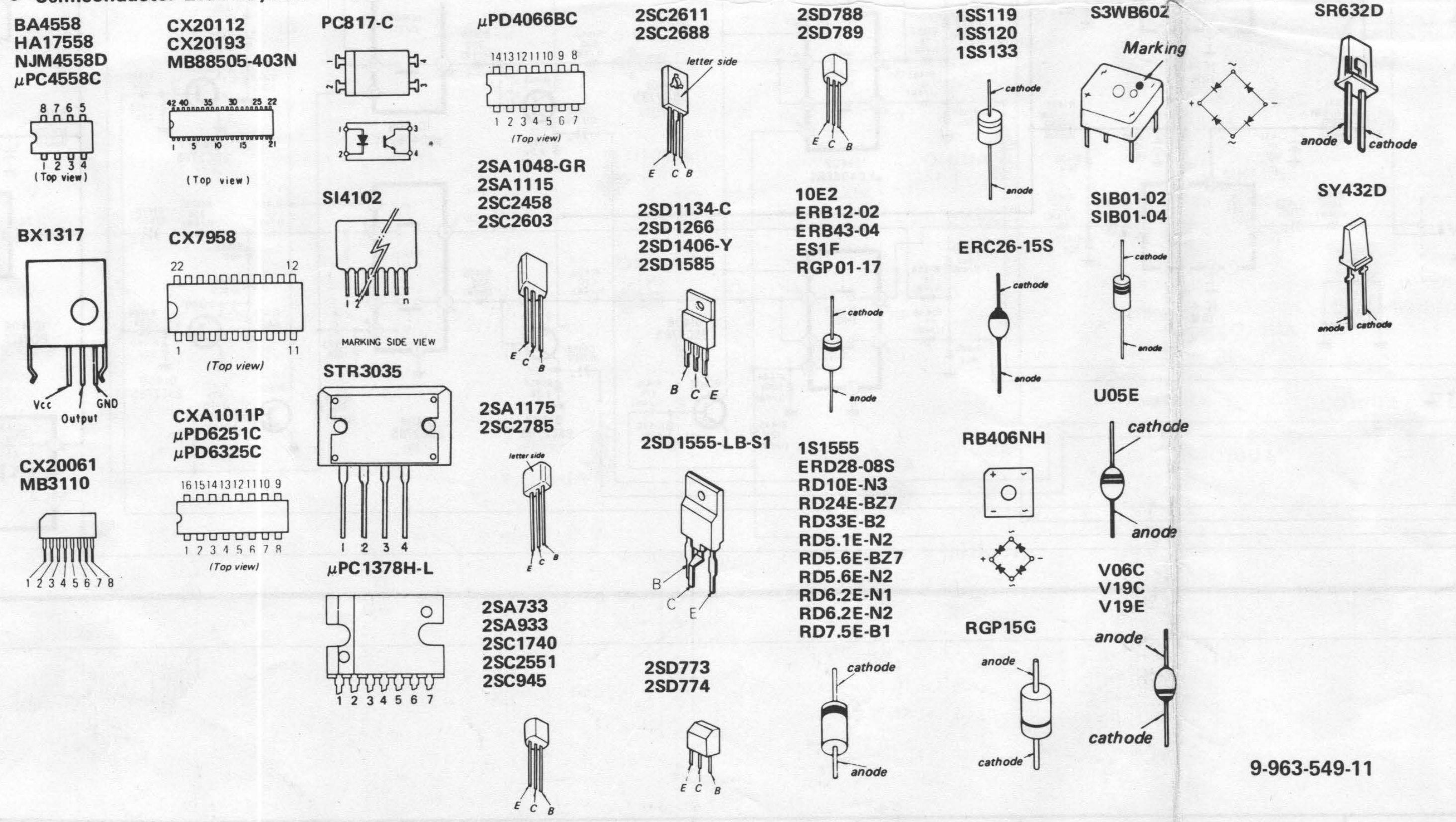
Adjust pin amplification with RV1502



C [R·G·B OUT]

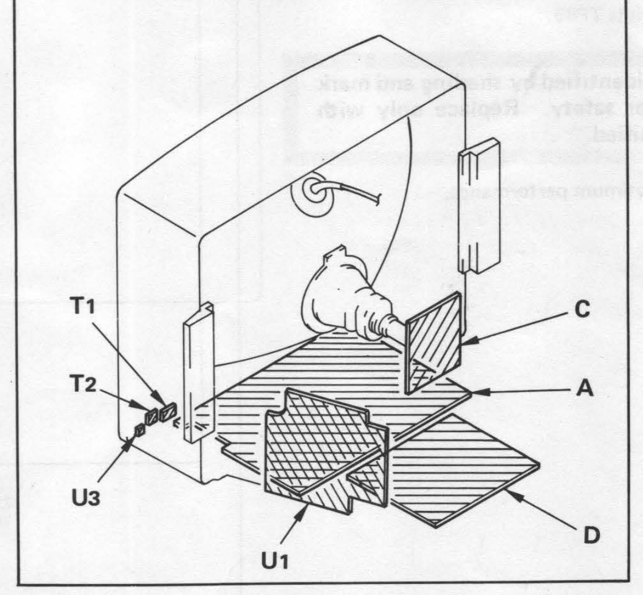

R DRV
G DRV
B DRV
B BKG
G BKG
R BKG
H.STAT
SONY
SCREEN VR
1-617-429-11

- **Semiconductor Lead Layouts**


BA4558
HA17558
NJM4558D
μPC4558C
(Top view)
CX20112
CX20193
MB88505-403N
(Top view)
PC817-C
μPD4066BC
(Top view)
2SC2611
2SC2688
letter side
E C B
2SD788
2SD789
1SS119
1SS120
1SS133
cathode
anode
S3WB602
Marking
SR632D
anode
cathode
BX1317
Vcc
Output
GND
CX7958
(Top view)
SI4102
MARKING SIDE VIEW
2SA1048-GR
2SA1115
2SC2458
2SC2603
2SD1134-C
2SD1266
2SD1406-Y
2SD1585
B C E
10E2
ERB12-02
ERB43-04
ES1F
RGP01-17
ERC26-15S
SIB01-02
SIB01-04
SY432D
CX20061
MB3110
CXA1011P
μPD6251C
μPD6325C
(Top view)
STR3035
2SA1175
2SC2785
2SD1555-LB-S1
1S1555
ERD28-08S
RD10E-N3
RD24E-BZ7
RD33E-B2
RD5.1E-N2
RD5.6E-BZ7
RD5.6E-N2
RD6.2E-N1
RD6.2E-N2
RD7.5E-B1
RB406NH
U05E
μPC1378H-L
2SA733
2SA933
2SC1740
2SC2551
2SC945
2SD773
2SD774
RGP15G
V06C
V19C
V19E

9-963-549-11

CIRCUIT BOARDS LOCATION


T1
T2
U3
U1
C
A
D

Sony Corporation

86BH0549-1
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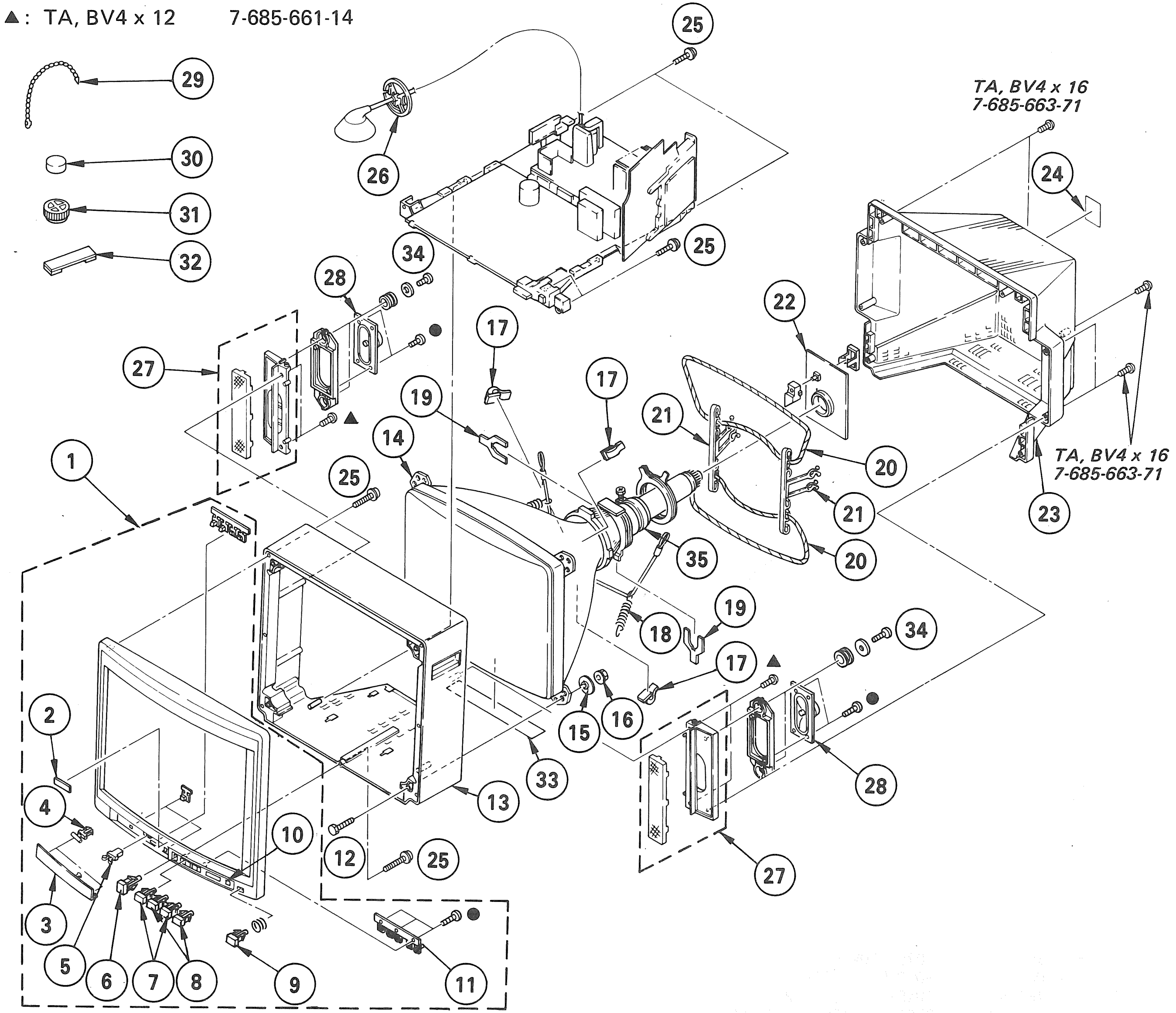
SECTION 5
EXPLODED VIEWS

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- As to the part numbered with E-, refer to the electrical parts list.
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

5-1. PICTURE TUBE

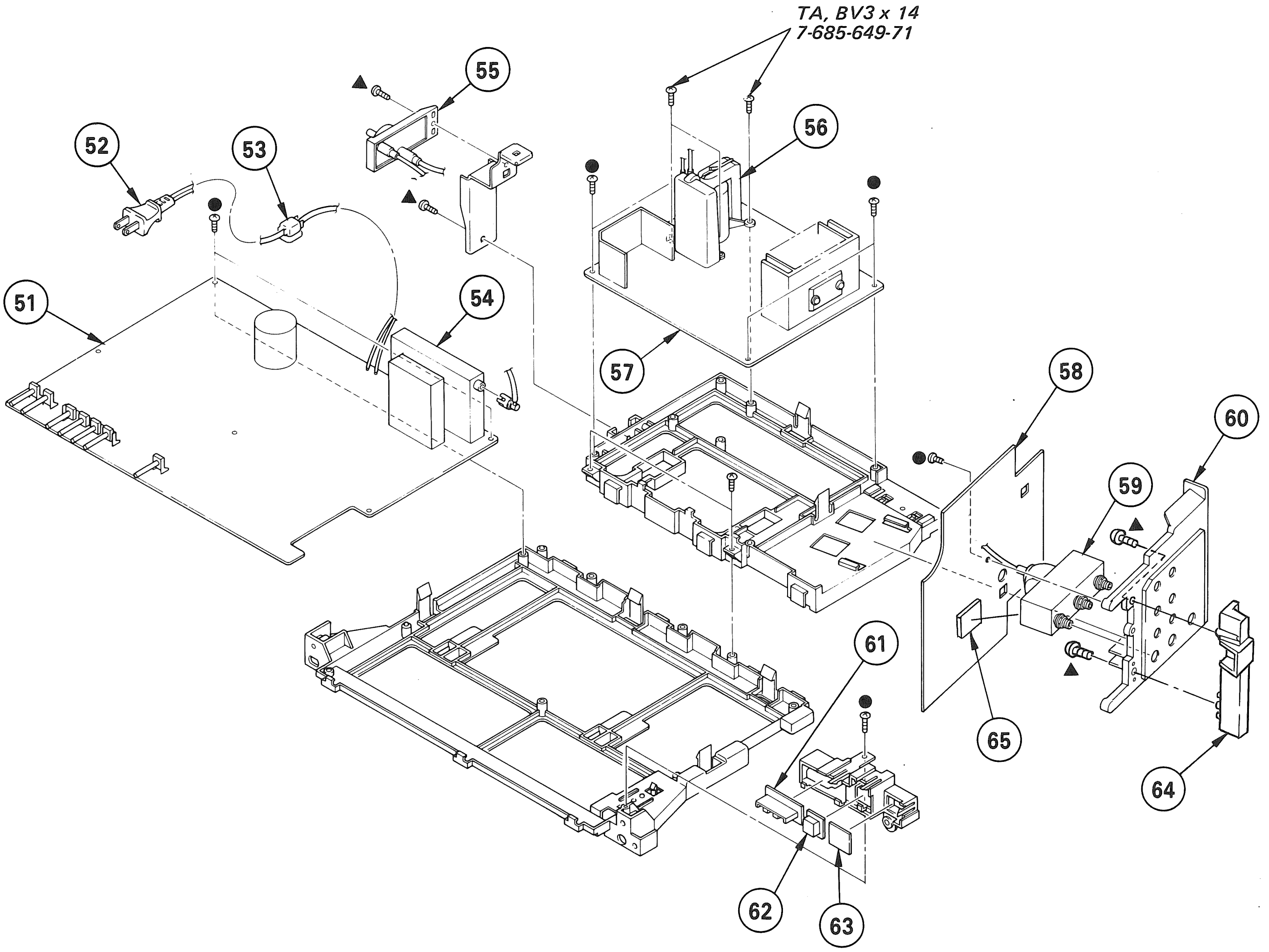
●: TA, BV3 x 12 7-685-648-71
▲: TA, BV4 x 12 7-685-661-14



No.	Part No.	Description	Remark
1	X-4379-104-1	BEZEL ASSY	2-11
2	4-374-115-01	EMBLEM, SONY	
3	4-374-275-21	DOOR, CONTROL	
4	3-662-365-00	SHAFT (S), DOOR	
5	4-374-714-01	CATCH, PUSH	
6	4-379-112-01	BUTTON (D)	
7	4-379-111-01	BUTTON (C)	
8	4-379-110-01	BUTTON (B)	
9	X-4379-102-1	BUTTON (A) ASSY	
10	4-379-114-01	PLATE, TRANSPARENT	
11	*4-379-113-01	HINGE (B), BUTTON	
12	3-703-025-12	BOLT M5, HEXAGON-HEAD	
13	4-379-117-01	CABINET	
14	⚠8-736-951-05	CRT (A51JKQ/0X)	
15	4-373-615-02	WASHER, CRT POSITIONING	
16	4-306-034-00	FLANGE NUT, (B) 5MM	
17	3-703-961-01	SPACER, DY	
18	*4-375-394-01	SPRING, TENSION	
19	1-452-277-00	MAGNET, BMC	
20	⚠.1-426-227-23	COIL, DEMAGNETIZATION	
21	*4-374-720-01	BAND, COIL, DEGAUSS	
22	*A-1330-667-A	C BOARD, COMPLETE	
23	4-379-118-01	COVER, REAR	
24	*4-379-105-01	LABEL, MODEL NUMBER	
25	4-319-520-00	SCREW, SPECIAL (+PW4X30)	
26	*4-369-234-01	HOLDER, HV CABLE	
27	X-4374-220-2	PANEL ASSY, SP	
28	1-503-258-21	SPEAKER	
29	4-308-870-00	CLIP, LEAD WIRE	
30	1-452-032-00	MAGNET, DISK; 10MM ø	
31	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ø	
32	X-4309-608-0	PERMALLOY ASSY, CONVERGENCE	
33	4-370-595-01	CLOTH, BLOTTING	
34	4-314-843-00	SCREW, TAPPING, +4X12	
35	⚠.1-451-268-11	DEFLECTION YOKE (SY-153C)	

5-2. CHASSIS

●: TA, BV3 x 12 7-685-648-71
▲: TA, BV4 x 12 7-685-661-14



No.	Part No.	Description	Remark
51	*A-1296-084-A	A BOARD, COMPLETE	
52	⚠.1-557-269-11	CORD, POWER	
53	⚠.4-022-115-01	HOLDER, AC CORD	
54	⚠.1-463-603-11	TUNER, ET (BTP-201)	
55	⚠.1-230-786-12	RESISTER ASSY, HIGH-VOLTAGE	
56	⚠.1-439-351-21	TRANSFORMER ASSY, FLYBACK	
57	*A-1345-582-A	D BOARD, COMPELTE	
58	*A-1389-735-A	U1 BOARD, COMPLETE	
59	⚠.1-417-121-21	SELECTOR, ANTENNA	
60	1-536-973-11	TERMINAL BOARD, INPUT/OUTPUT	
61	*1-617-431-11	T1 BOARD	
62	*1-617-432-11	T2 BOARD	
63	*1-617-511-11	U3 BOARD	
64	*4-379-852-01	BRACKET, TERMINAL BOARD	
65	*1-617-510-11	U2 BOARD	

> The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

When indicating parts by reference number, please include the board name.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
- MF : μF, PF : μμF

RESISTORS
- All resistors are in ohms
- F : nonflammable

COILS
- MMH : mH, UH : μH

- The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Select the resistance value according to SAFETY RELATED ADJUSTMENT.

Ref.No.	Part No.	Description			Remark
	*A-1296-084-A	A BOARD, COMPLETE ******************			
	1-464-597-11	IF BLOCK (IFA-450)			

CONNECTOR

Ref.No.	Part No.	Description	Remark
A1	*1-564-441-11	PLUG, CONNECTOR (2.5MM) 5P	
A2	*1-564-440-11	PLUG, CONNECTOR (2.5MM) 4P	
A5	*1-564-353-00	PLUG, CONNECTOR (2.5MM) 2P	
A6	*1-508-765-00	3P PLUG (M)	
A7	*1-564-442-11	PLUG, CONNECTOR (2.5MM) 6P	
A8	*1-564-442-11	PLUG, CONNECTOR (2.5MM) 6P	
A9	*1-564-353-00	PLUG, CONNECTOR (2.5MM) 2P	
A10	*1-508-767-00	5P PLUG	
A11	*1-564-442-11	PLUG, CONNECTOR (2.5MM) 6P	
A12	*1-564-440-11	PLUG, CONNECTOR (2.5MM) 4P	
A14	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)	
A15	*1-560-123-00	PLUG, CONNECTOR (2.5MM PITCH)	
A18	*1-564-353-00	PLUG, CONNECTOR (2.5MM) 2P	
A20	*1-560-124-00	PLUG, CONNECTOR (2.5MM PITCH)	

CAPACITOR

Ref.No.	Part No.	Description			Remark
C001	1-101-004-00	CERAMIC	0.01MF		50V
C100	1-123-380-00	ELECT	1MF	20%	50V
C101	1-101-880-00	CERAMIC	47PF	5%	50V
C102	1-123-333-00	ELECT	100MF	20%	16V
C103	1-123-324-00	ELECT	1000MF	20%	16V
C104	1-123-356-00	ELECT	10MF	20%	50V
C105	1-123-330-00	ELECT	22MF	20%	25V
C106	1-123-381-00	ELECT	2.2MF	20%	50V
C107	1-123-306-00	ELECT	47MF	20%	10V
C108	1-101-006-00	CERAMIC	0.047MF		50V
C109	1-102-973-00	CERAMIC	100PF	5%	50V
C110	1-123-356-00	ELECT	10MF	20%	50V
C111	1-102-973-00	CERAMIC	100PF	5%	50V
C112	1-102-976-00	CERAMIC	180PF	5%	50V
C113	1-102-973-00	CERAMIC	100PF	5%	50V
C114	1-102-978-00	CERAMIC	220PF	5%	50V
C115	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C116	1-124-444-00	ELECT	220MF	20%	10V
C117	1-106-220-00	MYLAR	0.1MF	10%	100V
C119	1-102-074-00	CERAMIC	0.001MF	10%	50V
C120	1-108-634-81	MYLAR	0.047MF	10%	100V
C121	1-101-880-00	CERAMIC	47PF	5%	50V
C122	1-101-884-00	CERAMIC	56PF	5%	50V
C123	1-102-074-00	CERAMIC	0.001MF	10%	50V
C124	1-123-318-00	ELECT	33MF	20%	16V
C125	1-102-976-00	CERAMIC	180PF	5%	50V
C126	1-102-976-00	CERAMIC	180PF	5%	50V
C127	1-123-369-00	ELECT	4.7MF	20%	50V
C129	1-101-006-00	CERAMIC	0.047MF		50V
C130	1-119-363-00	ELECT	4.7MF		25V
C131	1-123-380-00	ELECT	1MF	20%	50V
C132	1-108-616-91	MYLAR	0.0015MF	10%	100V
C133	1-123-380-00	ELECT	1MF	20%	50V
C134	1-123-369-00	ELECT	4.7MF	20%	50V
C143	1-124-002-11	ELECT	1MF	20%	50V
C144	1-124-002-11	ELECT	1MF	20%	50V
C170	1-123-380-00	ELECT	1MF	20%	50V
C171	1-101-004-00	CERAMIC	0.01MF		50V
C172	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C173	1-123-318-00	ELECT	33MF	20%	16V
C190	1-123-380-00	ELECT	1MF	20%	50V
C191	1-108-618-91	MYLAR	0.0022MF	10%	100V
C201	1-102-530-00	CERAMIC	120PF	5%	50V
C203	1-123-332-00	ELECT	47MF	20%	16V
C204	1-123-380-00	ELECT	1MF	20%	50V
C205	1-102-945-00	CERAMIC	8PF	1PF	50V
C224	1-102-953-00	CERAMIC	18PF	5%	50V
C241	1-101-003-00	CERAMIC	0.0047MF		50V
C242	1-101-003-00	CERAMIC	0.0047MF		50V
C260	1-123-356-00	ELECT	10MF	20%	50V
C301	1-123-330-00	ELECT	22MF	20%	25V
C302	1-123-330-00	ELECT	22MF	20%	25V
C303	1-123-333-00	ELECT	100MF	20%	16V
C304	1-123-318-00	ELECT	33MF	20%	16V
C306	1-102-978-00	CERAMIC	220PF	5%	50V
C307	1-123-381-00	ELECT	2.2MF	20%	50V
C308	1-123-369-00	ELECT	4.7MF	20%	50V
C309	1-123-330-00	ELECT	22MF	20%	25V
C310	1-123-356-00	ELECT	10MF	20%	50V
C311	1-102-978-00	CERAMIC	220PF	5%	50V
C312	1-102-951-00	CERAMIC	15PF	5%	50V
C313	1-101-884-00	CERAMIC	56PF	5%	50V
C314	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C315	1-123-356-00	ELECT	10MF	20%	50V
C316	1-101-006-00	CERAMIC	0.047MF		50V
C317	1-136-169-00	FILM	0.22MF	5%	50V
C320	1-102-074-00	CERAMIC	0.001MF	10%	50V
C330	1-123-318-00	ELECT	33MF	20%	16V
C345	1-123-318-00	ELECT	33MF	20%	16V
C350	1-102-525-00	CERAMIC	68PF	5%	50V
C351	1-106-214-00	MYLAR	0.056MF	10%	100V
C352	1-123-380-00	ELECT	1MF	20%	50V
C353	1-102-112-00	CERAMIC	330PF	10%	50V
C354	1-124-272-00	ELECT	2.2MF	20%	50V
C355	1-123-380-00	ELECT	1MF	20%	50V
C357	1-101-880-00	CERAMIC	47PF	5%	50V
C358	1-123-333-00	ELECT	100MF	20%	16V
C360	1-101-880-00	CERAMIC	47PF	5%	50V
C420	1-123-323-00	ELECT	470MF	20%	16V
C501	1-123-333-00	ELECT	100MF	20%	16V
C502	1-123-356-00	ELECT	10MF	20%	50V
C505	1-123-318-00	ELECT	33MF	20%	16V

Ref.No.	Part No.	Description				Remark
C506	1-123-333-00	ELECT	100MF	20%	16V	
C507	1-108-622-91	MYLAR	0.0047MF	10%	100V	
C508	1-123-319-00	ELECT	47MF	20%	16V	
C509	1-136-173-00	FILM	0.47MF	5%	50V	
C510	1-102-112-00	CERAMIC	330PF	10%	50V	
C511	1-123-356-00	ELECT	10MF	20%	50V	
C512	1-131-373-00	TANTALUM	22MF	10%	16V	
C513	1-108-614-91	MYLAR	0.001MF	10%	100V	
C514	1-123-333-00	ELECT	100MF	20%	16V	
C517	1-123-332-00	ELECT	47MF	20%	16V	
C532	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C536	1-123-356-00	ELECT	10MF	20%	50V	
C549	1-123-356-00	ELECT	10MF	20%	50V	
C557	1-123-357-00	ELECT	22MF	20%	50V	
C571	1-124-648-00	ELECT	4.7MF	20%	35V	
C601 ⚠	1-130-845-51	FILM	0.22MF	20%	125V	
C602	1-125-215-00	ELECT(BLOCK)	560MF		200V	
C603	1-161-830-00	CERAMIC	0.0047MF		500V	
C604	1-161-830-00	CERAMIC	0.0047MF		500V	
C605	1-123-948-00	ELECT	22MF	20%	250V	
C606	1-123-308-00	ELECT	220MF	20%	10V	
C608	1-123-934-00	ELECT	22MF	20%	160V	
C801	1-131-368-00	TANTALUM	3.3MF	10%	16V	
C802	1-123-382-00	ELECT	3.3MF	20%	50V	
C803	1-131-371-00	TANTALUM	10MF	10%	16V	
C804	1-123-381-00	ELECT	2.2MF	20%	50V	
C805	1-123-330-00	ELECT	22MF	20%	25V	
C806	1-123-380-00	ELECT	1MF	20%	50V	
C807	1-123-356-00	ELECT	10MF	20%	50V	
C808	1-108-603-00	MYLAR	0.1MF	5%	50V	
C809	1-108-587-00	MYLAR	0.022MF	5%	50V	
C810	1-123-369-00	ELECT	4.7MF	20%	50V	
C811	1-108-630-91	MYLAR	0.022MF	10%	100V	
C812	1-106-196-00	MYLAR	0.01MF	10%	100V	
C813	1-123-356-00	ELECT	10MF	20%	50V	
C814	1-123-356-00	ELECT	10MF	20%	50V	
C815	1-123-369-00	ELECT	4.7MF	20%	50V	
C816	1-123-356-00	ELECT	10MF	20%	50V	
C817	1-123-356-00	ELECT	10MF	20%	50V	
C818	1-123-369-00	ELECT	4.7MF	20%	50V	
C819	1-130-309-00	FILM	0.033MF	5%	100V	
C820	1-123-356-00	ELECT	10MF	20%	50V	
C821	1-130-279-00	FILM	0.0018MF	5%	100V	
C822	1-123-380-00	ELECT	1MF	20%	50V	
C823	1-123-356-00	ELECT	10MF	20%	50V	
C824	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C825	1-123-356-00	ELECT	10MF	20%	50V	
C826	1-123-323-00	ELECT	470MF	20%	16V	
C827	1-123-356-00	ELECT	10MF	20%	50V	
C828	1-108-622-91	MYLAR	0.0047MF	10%	100V	
C829	1-123-356-00	ELECT	10MF	20%	50V	
C830	1-123-380-00	ELECT	1MF	20%	50V	
C831	1-124-284-00	ELECT	10MF	20%	16V	
C832	1-106-180-00	MYLAR	0.0022MF	10%	50V	
C833	1-123-356-00	ELECT	10MF	20%	50V	
C834	1-123-321-00	ELECT	220MF	20%	16V	
C835	1-123-357-00	ELECT	22MF	20%	35V	
C837	1-123-357-00	ELECT	22MF	20%	35V	
C838	1-123-333-00	ELECT	100MF	20%	16V	
C841	1-123-384-00	ELECT	10MF	20%	100V	
C842	1-123-384-00	ELECT	10MF	20%	100V	
C843	1-123-381-00	ELECT	2.2MF	20%	100V	
C844	1-123-930-00	ELECT	2.2MF	20%	160V	
C845	1-123-381-00	ELECT	2.2MF	20%	100V	
C848	1-106-220-00	MYLAR	0.1MF	10%	100V	
C849	1-123-930-00	ELECT	2.2MF	20%	160V	
C850	1-106-220-00	MYLAR	0.1MF	10%	100V	
C870	1-123-369-00	ELECT	4.7MF	20%	50V	
C875	1-123-369-00	ELECT	4.7MF	20%	50V	
C899	1-123-323-00	ELECT	470MF	20%	16V	

DIODE

Ref.No.	Part No.	Description	Remark
D050	8-719-911-19	DIODE 1SS119	
D052	8-719-911-19	DIODE 1SS119	
D053	8-719-911-19	DIODE 1SS119	
D054	8-719-911-19	DIODE 1SS119	
D055	8-719-911-19	DIODE 1SS119	
D101	8-719-101-04	DIODE RD33E-B2	
D102	8-719-815-55	DIODE 1S1555	
D103	8-719-815-55	DIODE 1S1555	
D104	8-719-815-55	DIODE 1S1555	
D105	8-719-911-19	DIODE 1SS119	
D106	8-719-102-71	DIODE RD5.6E-N2	
D107	8-719-911-19	DIODE 1SS119	
D108	8-719-911-19	DIODE 1SS119	
D109	8-719-911-19	DIODE 1SS119	
D112	8-719-815-55	DIODE 1S1555	
D113	8-719-815-55	DIODE 1S1555	
D301	8-719-911-19	DIODE 1SS119	
D302	8-719-911-19	DIODE 1SS119	
D303	8-719-911-19	DIODE 1SS119	
D304	8-719-102-71	DIODE RD5.6E-N2	
D307	8-719-815-55	DIODE 1S1555	
D501	8-719-102-74	DIODE RD6.2E-N2	
D503	8-719-102-71	DIODE RD5.6E-N2	
D504	8-719-190-00	DIODE RD24E-BZ7	
D510	8-719-156-07	DIODE RD5.6E-B	
D601 ⚠	8-719-503-06	DIODE S3WB60Z	
D602	8-719-200-02	DIODE 10E2	
D603	8-719-911-55	DIODE U05G	
D604	8-719-911-55	DIODE U05G	
D605	8-719-102-68	DIODE RD5.1E-N2	
D606	8-719-924-06	DIODE ERC24-06S	
D831	8-719-102-73	DIODE RD6.2E-N1	
D832	8-719-911-19	DIODE 1SS119	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

DELAY LINE

Ref.No.	Part No.	Description	Remark
DL351	1-415-470-11	DELAY LINE (1H)	

FUSE

Ref.No.	Part No.	Description	Remark
F601 ⚠	1-532-509-11	FUSE, GLASS TUBE 6.3A/125V	
	1-533-190-11	CLIP, FUSE; F601	
F602 ⚠	1-532-741-11	FUSE, GLASS TUBE 1.25A/125V	
	1-533-189-11	HOLDER, FUSE; F602	

IC

Ref.No.	Part No.	Description	Remark
IC101	8-759-923-41	IC MB88505-403N	
IC102	8-759-105-59	IC UPD6251C	
IC103	8-759-909-50	IC CX-7958	
IC104	8-759-104-05	IC UPD6325C	
IC301	8-752-019-30	IC CX20193	
IC810	8-752-011-20	IC CX20112	
IC811	8-759-900-70	IC MB3110	
IC812	8-752-030-26	IC CXA1011P	
IC813 ⚠	8-749-900-15	IC SI-4102	
IC814 ⚠	8-749-900-15	IC SI-4102	

COIL

Ref.No.	Part No.	Description	Remark
L101	1-408-405-00	MICRO INDUCTOR 4.7UH	
L102	1-408-420-00	MICRO INDUCTOR 82UH	
L103	1-404-538-11	COIL	
L104	1-407-717-00	MICRO INDUCTOR 1MMH	
L105	1-408-437-31	MICRO INDUCTOR 3.9UH	
L106	1-408-437-31	MICRO INDUCTOR 3.9UH	
L107	1-408-444-31	MICRO INDUCTOR 15UH	
L108	1-408-444-31	MICRO INDUCTOR 15UH	
L109	1-408-437-31	MICRO INDUCTOR 3.9UH	
L200	1-408-441-31	MICRO INDUCTOR 8.2UH	
L201	1-408-409-00	MICRO INDUCTOR 10UH	
L202	1-408-421-00	MICRO INDUCTOR 100UH	
L204	1-408-415-00	MICRO INDUCTOR 33UH	
L303	1-408-417-00	MICRO INDUCTOR 47UH	
L350	1-408-424-00	MICRO INDUCTOR 180UH	
L351	1-404-607-11	COIL	
L352	1-408-414-00	MICRO INDUCTOR 27UH	
L353	1-408-412-00	MICRO INDUCTOR 18UH	
L601	1-408-225-00	MICRO INDUCTOR 3.3UH	
L602	1-408-225-00	MICRO INDUCTOR 3.3UH	
L603	1-408-398-00	MICRO INDUCTOR 1.2UH	
L801	1-408-242-00	MICRO INDUCTOR 10MMH	

TRANSISTOR

Ref.No.	Part No.	Description	Remark
Q101	8-729-178-54	TRANSISTOR 2SC2785	
Q102	8-729-178-54	TRANSISTOR 2SC2785	
Q104	8-729-178-54	TRANSISTOR 2SC2785	
Q106	8-729-178-54	TRANSISTOR 2SC2785	
Q107	8-729-178-54	TRANSISTOR 2SC2785	
Q109	8-729-178-54	TRANSISTOR 2SC2785	
Q110	8-729-178-54	TRANSISTOR 2SC2785	
Q111	8-729-178-54	TRANSISTOR 2SC2785	
Q190	8-729-117-54	TRANSISTOR 2SA1175	
Q202	8-729-117-54	TRANSISTOR 2SA1175	
Q203	8-729-178-54	TRANSISTOR 2SC2785	
Q204	8-729-178-54	TRANSISTOR 2SC2785	
Q205	8-729-178-54	TRANSISTOR 2SC2785	
Q206	8-729-178-54	TRANSISTOR 2SC2785	
Q207	8-729-178-54	TRANSISTOR 2SC2785	
Q301	8-729-117-54	TRANSISTOR 2SA1175	
Q302	8-729-178-54	TRANSISTOR 2SC2785	
Q304	8-729-117-54	TRANSISTOR 2SA1175	
Q305	8-729-178-54	TRANSISTOR 2SC2785	
Q306	8-729-117-54	TRANSISTOR 2SA1175	
Q348	8-729-178-54	TRANSISTOR 2SC2785	
Q350	8-729-178-54	TRANSISTOR 2SC2785	
Q351	8-729-117-54	TRANSISTOR 2SA1175	
Q352	8-729-117-54	TRANSISTOR 2SA1175	
Q353	8-729-178-54	TRANSISTOR 2SC2785	
Q354	8-729-178-54	TRANSISTOR 2SC2785	
Q355	8-729-178-54	TRANSISTOR 2SC2785	
Q356	8-729-178-54	TRANSISTOR 2SC2785	
Q357	8-729-178-54	TRANSISTOR 2SC2785	
Q358	8-729-178-54	TRANSISTOR 2SC2785	
Q359	8-729-178-54	TRANSISTOR 2SC2785	
Q360	8-729-117-54	TRANSISTOR 2SA1175	
Q361	8-729-600-12	TRANSISTOR 2SK108	
Q501	8-729-201-78	TRANSISTOR 2SD1406	
Q502	8-729-178-54	TRANSISTOR 2SC2785	
Q503	8-729-177-43	TRANSISTOR 2SD774	
Q504	8-729-178-54	TRANSISTOR 2SC2785	
Q505	8-729-178-54	TRANSISTOR 2SC2785	
Q601	8-729-255-12	TRANSISTOR 2SC2551	
Q804	8-729-117-54	TRANSISTOR 2SA1175	
Q805	8-729-178-54	TRANSISTOR 2SC2785	
Q810	8-729-378-84	TRANSISTOR 2SD788	
Q831	8-729-178-54	TRANSISTOR 2SC2785	

RESISTOR

Ref.No.	Part No.	Description				Remark
R100	1-249-437-11	CARBON	47K	5%	1/6W	
R101	1-215-898-11	METAL OXIDE	10K	5%	2W	F
R102	1-247-713-11	CARBON	1K	5%	1/4W	
R103	1-247-149-00	CARBON	5.6K	5%	1/4W	
R104	1-249-433-11	CARBON	22K	5%	1/6W	
R105	1-247-829-00	CARBON	820	5%	1/6W	
R106	1-247-829-00	CARBON	820	5%	1/6W	
R108	1-249-437-11	CARBON	47K	5%	1/6W	
R109	1-247-831-00	CARBON	1K	5%	1/6W	
R110	1-249-434-11	CARBON	27K	5%	1/6W	
R113	1-247-717-11	CARBON	2.2K	5%	1/4W	
R114	1-247-717-11	CARBON	2.2K	5%	1/4W	
R115	1-247-717-11	CARBON	2.2K	5%	1/4W	
R116	1-247-717-11	CARBON	2.2K	5%	1/4W	

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A

Ref.No.	Part No.	Description				Remark
R117	1-247-811-00	CARBON	150	5%	1/6W	
R118	1-247-859-00	CARBON	15K	5%	1/6W	
R119	1-249-421-11	CARBON	2.2K	5%	1/6W	
R120	1-249-421-11	CARBON	2.2K	5%	1/6W	
R121	1-249-421-11	CARBON	2.2K	5%	1/6W	
R122	1-249-421-11	CARBON	2.2K	5%	1/6W	
R123	1-249-429-11	CARBON	10K	5%	1/6W	
R124	1-249-421-11	CARBON	2.2K	5%	1/6W	
R125	1-249-421-11	CARBON	2.2K	5%	1/6W	
R126	1-249-421-11	CARBON	2.2K	5%	1/6W	
R127	1-249-421-11	CARBON	2.2K	5%	1/6W	
R128	1-247-807-00	CARBON	100	5%	1/6W	
R129	1-249-429-11	CARBON	10K	5%	1/6W	
R131	1-249-434-11	CARBON	27K	5%	1/6W	
R132	1-249-414-11	CARBON	560	5%	1/6W	
R133	1-249-414-11	CARBON	560	5%	1/6W	
R134	1-249-419-11	CARBON	1.5K	5%	1/6W	
R135	1-247-821-00	CARBON	390	5%	1/6W	
R137	1-249-419-11	CARBON	1.5K	5%	1/6W	
R138	1-247-831-00	CARBON	1K	5%	1/6W	
R139	1-249-421-11	CARBON	2.2K	5%	1/6W	
R140	1-249-421-11	CARBON	2.2K	5%	1/6W	
R141	1-247-867-00	CARBON	33K	5%	1/6W	
R142	1-247-847-00	CARBON	4.7K	5%	1/6W	
R143	1-247-831-00	CARBON	1K	5%	1/6W	
R144	1-249-414-11	CARBON	560	5%	1/6W	
R145	1-249-433-11	CARBON	22K	5%	1/6W	
R146	1-247-823-00	CARBON	470	5%	1/6W	
R147	1-249-437-11	CARBON	47K	5%	1/6W	
R148	1-247-721-11	CARBON	4.7K	5%	1/4W	
R149	1-247-717-11	CARBON	2.2K	5%	1/4W	
R150	1-249-429-11	CARBON	10K	5%	1/6W	
R151	1-247-721-11	CARBON	4.7K	5%	1/4W	
R152	1-249-469-11	CARBON	100K	5%	1/4W	
R153	1-249-433-11	CARBON	22K	5%	1/6W	
R154	1-247-725-11	CARBON	10K	5%	1/4W	
R155	1-247-853-00	CARBON	8.2K	5%	1/6W	
R156	1-249-421-11	CARBON	2.2K	5%	1/6W	
R157	1-247-163-00	CARBON	22K	5%	1/4W	
R158	1-249-421-11	CARBON	2.2K	5%	1/6W	
R159	1-249-421-11	CARBON	2.2K	5%	1/6W	
R160	1-247-125-00	CARBON	560	5%	1/4W	
R161	1-247-879-00	CARBON	100K	5%	1/6W	
R162	1-247-863-00	CARBON	22K	5%	1/6W	
R163	1-247-163-00	CARBON	22K	5%	1/4W	
R164	1-247-849-00	CARBON	5.6K	5%	1/6W	
R165	1-247-173-00	CARBON	56K	5%	1/4W	
R166	1-249-429-11	CARBON	10K	5%	1/6W	
R167	1-249-437-11	CARBON	47K	5%	1/6W	
R170	1-249-425-11	CARBON	4.7K	5%	1/6W	
R171	1-249-421-11	CARBON	2.2K	5%	1/6W	
R172	1-249-421-11	CARBON	2.2K	5%	1/6W	
R173	1-247-717-11	CARBON	2.2K	5%	1/4W	
R174	1-247-153-00	CARBON	8.2K	5%	1/4W	
R175	1-249-421-11	CARBON	2.2K	5%	1/6W	
R176	1-249-421-11	CARBON	2.2K	5%	1/6W	
R177	1-249-425-11	CARBON	4.7K	5%	1/6W	
R179	1-247-831-00	CARBON	1K	5%	1/6W	
R180	1-247-815-00	CARBON	220	5%	1/6W	
R181	1-247-815-00	CARBON	220	5%	1/6W	
R182	1-247-717-11	CARBON	2.2K	5%	1/4W	
R183	1-249-419-11	CARBON	1.5K	5%	1/6W	
R184	1-249-433-11	CARBON	22K	5%	1/6W	
R185	1-249-419-11	CARBON	1.5K	5%	1/6W	
R186	1-249-421-11	CARBON	2.2K	5%	1/6W	
R187	1-247-717-11	CARBON	2.2K	5%	1/4W	
R188	1-247-895-00	CARBON	470K	5%	1/6W	
R189	1-247-879-00	CARBON	100K	5%	1/6W	
R190	1-247-895-00	CARBON	470K	5%	1/6W	
R191	1-247-879-00	CARBON	100K	5%	1/6W	
R192	1-247-133-00	CARBON	1.2K	5%	1/4W	
R193	1-244-887-51	CARBON	3.9K	5%	1/2W	
R194	1-249-421-11	CARBON	2.2K	5%	1/6W	
R195	1-247-807-00	CARBON	100	5%	1/6W	
R196	1-249-440-11	CARBON	82K	5%	1/6W	
R197	1-247-706-11	CARBON	330	5%	1/4W	
R198	1-247-891-00	CARBON	330K	5%	1/6W	
R199	1-249-429-11	CARBON	10K	5%	1/6W	
R203	1-247-831-00	CARBON	1K	5%	1/6W	
R204	1-215-457-00	METAL	33K	1%	1/6W	
R205	1-214-765-00	METAL	33K	1%	1/4W	
R206	1-247-845-00	CARBON	3.9K	5%	1/6W	
R209	1-247-713-11	CARBON	1K	5%	1/4W	
R210	1-247-831-00	CARBON	1K	5%	1/6W	
R211	1-247-129-00	CARBON	820	5%	1/4W	
R214	1-247-851-00	CARBON	6.8K	5%	1/6W	
R215	1-247-831-00	CARBON	1K	5%	1/6W	
R216	1-247-827-00	CARBON	680	5%	1/6W	
R217	1-247-829-00	CARBON	820	5%	1/6W	
R218	1-247-807-00	CARBON	100	5%	1/6W	
R219	1-247-821-00	CARBON	390	5%	1/6W	
R220	1-247-688-11	CARBON	10	5%	1/4W	
R236	1-247-807-00	CARBON	100	5%	1/6W	
R241	1-249-433-11	CARBON	22K	5%	1/6W	
R242	1-249-433-11	CARBON	22K	5%	1/6W	
R250	1-247-831-00	CARBON	1K	5%	1/6W	
R251	1-247-831-00	CARBON	1K	5%	1/6W	
R252	1-249-425-11	CARBON	4.7K	5%	1/6W	
R301	1-215-461-00	METAL	47K	1%	1/6W	
R302	1-246-523-00	CARBON	120K	5%	1/4W	
R303	1-249-432-11	CARBON	18K	5%	1/6W	
R304	1-247-133-00	CARBON	1.2K	5%	1/4W	
R305	1-247-903-00	CARBON	1M	5%	1/6W	
R306	1-214-748-00	METAL	6.2K	1%	1/4W	
R307	1-247-849-00	CARBON	5.6K	5%	1/6W	
R308	1-249-419-11	CARBON	1.5K	5%	1/6W	

Ref.No.	Part No.	Description				Remark
R309	1-247-725-11	CARBON	10K	5%	1/4W	
R310	1-247-851-00	CARBON	6.8K	5%	1/6W	
R311	1-246-511-00	CARBON	39K	5%	1/4W	
R312	1-247-833-00	CARBON	1.2K	5%	1/6W	
R313	1-249-429-11	CARBON	10K	5%	1/6W	
R316	1-247-845-00	CARBON	3.9K	5%	1/6W	
R317	1-249-429-11	CARBON	10K	5%	1/6W	
R318	1-249-469-11	CARBON	100K	5%	1/4W	
R319	1-247-867-00	CARBON	33K	5%	1/6W	
R320	1-247-843-00	CARBON	3.3K	5%	1/6W	
R321	1-247-151-00	CARBON	6.8K	5%	1/4W	
R322	1-249-432-11	CARBON	18K	5%	1/6W	
R323	1-247-879-00	CARBON	100K	5%	1/6W	
R324	1-247-847-00	CARBON	4.7K	5%	1/6W	
R325	1-247-704-11	CARBON	220	5%	1/4W	
R326	1-247-831-00	CARBON	1K	5%	1/6W	
R327	1-247-845-00	CARBON	3.9K	5%	1/6W	
R328	1-249-429-11	CARBON	10K	5%	1/6W	
R329	1-247-869-00	CARBON	39K	5%	1/6W	
R330	1-247-899-00	CARBON	680K	5%	1/6W	
R331	1-249-437-11	CARBON	47K	5%	1/6W	
R332	1-247-867-00	CARBON	33K	5%	1/6W	
R333	1-247-167-00	CARBON	33K	5%	1/4W	
R334	1-247-713-11	CARBON	1K	5%	1/4W	
R335	1-247-713-11	CARBON	1K	5%	1/4W	
R336	1-247-713-11	CARBON	1K	5%	1/4W	
R337	1-247-807-00	CARBON	100	5%	1/6W	
R338	1-246-511-00	CARBON	39K	5%	1/4W	
R339	1-247-700-11	CARBON	100	5%	1/4W	
R340	1-249-434-11	CARBON	27K	5%	1/6W	
R341	1-247-821-00	CARBON	390	5%	1/6W	
R342	1-247-821-00	CARBON	390	5%	1/6W	
R343	1-247-821-00	CARBON	390	5%	1/6W	
R344	1-247-821-00	CARBON	390	5%	1/6W	
R345	1-247-831-00	CARBON	1K	5%	1/6W	
R347	1-247-831-00	CARBON	1K	5%	1/6W	
R348	1-247-163-00	CARBON	22K	5%	1/4W	
R350	1-249-421-11	CARBON	2.2K	5%	1/6W	
R351	1-247-713-11	CARBON	1K	5%	1/4W	
R352	1-247-833-00	CARBON	1.2K	5%	1/6W	
R353	1-247-807-00	CARBON	100	5%	1/6W	
R354	1-202-730-00	SOLID	8.2M	10%	1/2W	
R355	1-247-725-11	CARBON	10K	5%	1/4W	
R356	1-247-831-00	CARBON	1K	5%	1/6W	
R357	1-247-859-00	CARBON	15K	5%	1/6W	
R358	1-247-831-00	CARBON	1K	5%	1/6W	
R359	1-249-421-11	CARBON	2.2K	5%	1/6W	
R360	1-247-831-00	CARBON	1K	5%	1/6W	
R361	1-247-813-00	CARBON	180	5%	1/6W	
R362	1-246-463-00	CARBON	390	5%	1/4W	
R363	1-247-807-00	CARBON	100	5%	1/6W	
R364	1-247-879-00	CARBON	100K	5%	1/6W	
R365	1-249-432-11	CARBON	18K	5%	1/6W	

Ref.No.	Part No.	Description				Remark
R366	1-249-433-11	CARBON	22K	5%	1/6W	
R367	1-247-718-11	CARBON	2.7K	5%	1/4W	
R368	1-247-827-00	CARBON	680	5%	1/6W	
R369	1-247-807-00	CARBON	100	5%	1/6W	
R370	1-247-718-11	CARBON	2.7K	5%	1/4W	
R371	1-247-713-11	CARBON	1K	5%	1/4W	
R372	1-247-845-00	CARBON	3.9K	5%	1/6W	
R373	1-247-827-00	CARBON	680	5%	1/6W	
R374	1-247-831-00	CARBON	1K	5%	1/6W	
R375	1-247-843-00	CARBON	3.3K	5%	1/6W	
R379	1-247-713-11	CARBON	1K	5%	1/4W	
R381	1-249-429-11	CARBON	10K	5%	1/6W	
R382	1-247-879-00	CARBON	100K	5%	1/6W	
R399	1-249-425-11	CARBON	4.7K	5%	1/6W	
R417	1-249-405-11	CARBON	100	5%	1/6W	F
R500	1-247-833-00	CARBON	1.2K	5%	1/6W	
R501	1-247-809-00	CARBON	120	5%	1/6W	
R502	1-247-817-00	CARBON	270	5%	1/6W	
R504	1-247-807-00	CARBON	100	5%	1/6W	
R505	1-215-882-00	METAL OXIDE	22	5%	2W	F
R506	1-247-827-00	CARBON	680	5%	1/6W	
R507	1-244-919-51	CARBON	82K	5%	1/2W	
R508	1-249-429-11	CARBON	10K	5%	1/6W	
R509	1-247-721-11	CARBON	4.7K	5%	1/4W	
R510	1-247-849-00	CARBON	5.6K	5%	1/6W	
R511	1-247-725-11	CARBON	10K	5%	1/4W	
R512	1-215-480-00	METAL	300K	1%	1/6W	
⧓R513 ⚠.		METAL			1/4W	
R514	1-247-851-00	CARBON	6.8K	5%	1/6W	
R515	1-247-152-00	CARBON	7.5K	5%	1/4W	
R517	1-215-445-00	METAL	10K	1%	1/6W	
R518	1-247-713-11	CARBON	1K	5%	1/4W	
R519	1-215-430-00	METAL	2.4K	1%	1/6W	
R520	1-247-843-00	CARBON	3.3K	5%	1/6W	
R521	1-247-831-00	CARBON	1K	5%	1/6W	
R526	1-215-899-11	METAL OXIDE	15K	5%	2W	F
R529	1-215-432-00	METAL	3K	1%	1/6W	
R530	1-247-149-00	CARBON	5.6K	5%	1/4W	
R532	1-214-777-00	METAL	100K	1%	1/4W	
R533	1-247-725-11	CARBON	10K	5%	1/4W	
R537	1-214-771-00	METAL	56K	1%	1/4W	
R539	1-216-460-11	METAL OXIDE	3.9K	5%	2W	F
R540 ⚠.	1-249-413-51	CARBON	470	5%	1/4W	F
R544	1-216-460-11	METAL OXIDE	3.9K	5%	2W	F
※R545	1-247-713-11	CARBON	1K	5%	1/4W	
※R545	1-247-717-11	CARBON	2.2K	5%	1/4W	
※R545	1-247-143-00	CARBON	3.3K	5%	1/4W	
※R545	1-247-721-11	CARBON	4.7K	5%	1/4W	
※R545	1-247-149-00	CARBON	5.6K	5%	1/4W	
※R545	1-247-151-00	CARBON	6.8K	5%	1/4W	
※R545	1-247-153-00	CARBON	8.2K	5%	1/4W	
※R545	1-247-725-11	CARBON	10K	5%	1/4W	
※R545	1-249-459-11	CARBON	12K	5%	1/4W	

- ※ : selected to yield optimum performance.
- The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Select the resistance value according to SAFETY RELATED ADJUSTMENT.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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Ref.No.	Part No.	Description				Remark
※R545	1-247-158-00	CARBON	13K	5%	1/4W	
※R545	1-249-460-11	CARBON	15K	5%	1/4W	
R546	1-215-878-00	METAL OXIDE	33K	5%	1W	F
R547	1-247-841-00	CARBON	2.7K	5%	1/6W	
R549	1-247-821-00	CARBON	390	5%	1/6W	
R550	1-247-713-11	CARBON	1K	5%	1/4W	
R551	1-249-425-11	CARBON	4.7K	5%	1/6W	F
R552	1-215-447-00	METAL	12K	1%	1/6W	
R553	1-247-845-00	CARBON	3.9K	5%	1/6W	
R554	1-249-421-11	CARBON	2.2K	5%	1/6W	
R558	1-247-171-00	CARBON	47K	5%	1/4W	
R559	1-214-785-00	METAL	220K	1%	1/4W	
R565	1-249-437-11	CARBON	47K	5%	1/6W	
R572	1-249-425-11	CARBON	4.7K	5%	1/6W	
R578	1-247-706-11	CARBON	330	5%	1/4W	
R601 ⚠.	1-202-719-51	SOLID	1M	10%	1/2W	
R602 ⚠.	1-205-792-11	CEMENTED	1.8	5%	10W	
R603	1-216-431-11	METAL OXIDE	560	5%	1W	F
R604	1-215-896-00	METAL OXIDE	4.7K	5%	2W	F
R605 ⚠.	1-205-691-11	CEMENTED	150	5%	20W	
R610 ⚠.	1-217-224-11	WIREWOUND	100	10%	2W	F
R611	1-215-872-11	METAL OXIDE	3.3K	5%	1W	F
R612	1-205-744-11	CEMENTED	4.7K	5%	20W	
R613	1-249-437-11	CARBON	47K	5%	1/6W	
R614	1-247-721-11	CARBON	4.7K	5%	1/4W	
R802	1-214-958-00	METAL	560K	1%	1/4W	
R803	1-215-449-00	METAL	15K	1%	1/6W	
R804	1-249-421-11	CARBON	2.2K	5%	1/6W	
R805	1-249-429-11	CARBON	10K	5%	1/6W	
R806	1-247-819-00	CARBON	330	5%	1/6W	
R807	1-247-819-00	CARBON	330	5%	1/6W	
R808	1-247-849-00	CARBON	5.6K	5%	1/6W	
R809	1-247-867-00	CARBON	33K	5%	1/6W	
R810	1-249-421-11	CARBON	2.2K	5%	1/6W	
R811	1-247-831-00	CARBON	1K	5%	1/6W	
R812	1-249-419-11	CARBON	1.5K	5%	1/6W	
R813	1-247-831-00	CARBON	1K	5%	1/6W	
R814	1-247-831-00	CARBON	1K	5%	1/6W	
R815	1-247-831-00	CARBON	1K	5%	1/6W	
R816	1-247-879-00	CARBON	100K	5%	1/6W	
R817	1-215-470-00	METAL	110K	1%	1/6W	
R818	1-215-470-00	METAL	110K	1%	1/6W	
R819	1-247-706-11	CARBON	330	5%	1/4W	
R820	1-247-713-11	CARBON	1K	5%	1/4W	
R821	1-247-713-11	CARBON	1K	5%	1/4W	
R822	1-249-414-11	CARBON	560	5%	1/6W	
R823	1-215-430-00	METAL	2.4K	1%	1/6W	
R824	1-247-853-00	CARBON	8.2K	5%	1/6W	
R825	1-247-833-00	CARBON	1.2K	5%	1/6W	
R826	1-249-429-11	CARBON	10K	5%	1/6W	
R827	1-249-429-11	CARBON	10K	5%	1/6W	
R828	1-247-721-11	CARBON	4.7K	5%	1/4W	
R829	1-249-429-11	CARBON	10K	5%	1/6W	

Ref.No.	Part No.	Description				Remark
R830	1-247-903-00	CARBON	1M	5%	1/6W	
R831	1-247-843-00	CARBON	3.3K	5%	1/6W	
R832	1-247-827-00	CARBON	680	5%	1/6W	
R833	1-247-827-00	CARBON	680	5%	1/6W	
R834	1-247-823-00	CARBON	470	5%	1/6W	
R835	1-247-829-00	CARBON	820	5%	1/6W	
R836	1-249-421-11	CARBON	2.2K	5%	1/6W	
R839 ⚠.	1-246-987-11	CARBON	47	5%	1/8W	F
R842 ⚠.	1-249-415-51	CARBON	680	5%	1/6W	F
R843 ⚠.	1-249-415-51	CARBON	680	5%	1/6W	F
R849 ⚠.	1-246-987-11	CARBON	47	5%	1/8W	F
R855	1-249-434-11	CARBON	27K	5%	1/6W	
R856	1-249-434-11	CARBON	27K	5%	1/6W	
R859	1-247-857-00	CARBON	12K	5%	1/6W	
R860	1-249-459-11	CARBON	12K	5%	1/4W	
R870	1-249-425-11	CARBON	4.7K	5%	1/6W	
R871	1-249-433-11	CARBON	22K	5%	1/6W	
R872	1-249-425-11	CARBON	4.7K	5%	1/6W	
R873	1-247-831-00	CARBON	1K	5%	1/6W	
R875	1-249-433-11	CARBON	22K	5%	1/6W	

VARIABLE RESISTOR

RV251	1-230-271-00	RES, ADJ, CARBON 4.7K
RV301	1-230-935-11	RES, VAR, CARBON 20KX4
RV302	1-230-935-11	RES, VAR, CARBON 20KX4
RV303	1-230-935-11	RES, VAR, CARBON 20KX4
RV304	1-230-935-11	RES, VAR, CARBON 20KX4
RV306	1-230-631-11	RES, ADJ, CARBON 22K
RV351	1-230-626-41	RES, ADJ, CARBON 470
RV501	1-228-724-00	RES, ADJ, CERAMIC CARBON 10K
RV503	1-228-728-00	RES, ADJ, CERAMIC CARBON 100K
RV505	1-230-271-00	RES, ADJ, CARBON 4.7K
RV506	1-230-631-11	RES, ADJ, CARBON 22K
RV801	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K
RV802	1-230-630-11	RES, ADJ, CARBON 10K
RV803	1-228-724-00	RES, ADJ, CERAMIC CARBON 10K
RV804	1-230-630-11	RES, ADJ, CARBON 10K
RV811	1-228-728-00	RES, ADJ, CERAMIC CARBON 100K
RV812	1-230-632-11	RES, ADJ, CARBON 33K
RV814	1-228-724-00	RES, ADJ, CERAMIC CARBON 10K
RV815	1-228-724-00	RES, ADJ, CERAMIC CARBON 10K
RV816	1-228-724-00	RES, ADJ, CERAMIC CARBON 10K
RV817	1-230-637-41	RES, ADJ, CARBON 470K

RELAY

RY601 ⚠.	1-515-573-11	RELAY, POWER

SWITCH

S002	1-554-804-11	SWITCH, PUSH (1 KEY)
S003	1-554-804-11	SWITCH, PUSH (1 KEY)
S004	1-554-804-11	SWITCH, PUSH (1 KEY)
S005	1-554-804-11	SWITCH, PUSH (1 KEY)
S006	1-554-804-11	SWITCH, PUSH (1 KEY)

- ※ : selected to yield optimum performance.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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Ref.No.	Part No.	Description	Remark
S007B	1-554-804-11	SWITCH, PUSH (1 KEY)	
S050	1-554-804-11	SWITCH, PUSH (1 KEY)	
S051	1-554-804-11	SWITCH, PUSH (1 KEY)	
S052	1-554-804-11	SWITCH, PUSH (1 KEY)	
S057	1-554-804-11	SWITCH, PUSH (1 KEY)	
S059	1-554-804-11	SWITCH, PUSH (1 KEY)	
S061	1-570-240-11	SWITCH, ROTARY	
S062	1-570-240-11	SWITCH, ROTARY	
S063	1-570-240-11	SWITCH, ROTARY	

TRANSFORMER

Ref.No.	Part No.	Description	Remark
T601	⚠1-421-357-31	TRANSFORMER, LINE FILTER	
T801	1-427-479-00	TRANSFORMER (SOT)	
T802	1-427-479-00	TRANSFORMER (SOT)	

THERMISTOR

Ref.No.	Part No.	Description	Remark
TH301	1-800-945-00	THERMISTOR S-10K	
THP601	⚠1-806-214-11	THERMISTER, POSITIVE	

CRYSTAL

Ref.No.	Part No.	Description	Remark
X301	1-527-396-00	CRYSTAL, OSC	

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Ref.No.	Part No.	Description	Remark
	*A-1330-667-A	C BOARD, COMPLETE *****************	
	⚠1-526-798-12	SOCKET, CRT	
	*4-379-160-01	COVER (REAR LID), CV	
	*4-379-167-01	COVER (MAIN), CV	

CONNECTOR

Ref.No.	Part No.	Description	Remark
C1	*1-506-371-00	2P PLUG (L)	
C2	*1-508-768-00	6P PLUG	
C3	*1-564-442-11	PLUG, CONNECTOR (2.5MM) 6P	

CAPACITOR

Ref.No.	Part No.	Description				Remark
C701	1-129-714-00	FILM	0.01MF	10%	630V	
C702	1-162-116-00	CERAMIC	680PF	10%	2KV	
C703	1-162-318-11	CERAMIC	0.001MF	10%	500V	
C704	1-123-370-00	ELECT	10MF	20%	63V	
C705	1-102-116-00	CERAMIC	680PF	10%	50V	
C706	1-102-116-00	CERAMIC	680PF	10%	50V	
C707	1-102-116-00	CERAMIC	680PF	10%	50V	
C708	1-102-109-00	CERAMIC	180PF	10%	50V	
C709	1-102-109-00	CERAMIC	180PF	10%	50V	
C710	1-102-109-00	CERAMIC	180PF	10%	50V	
C722	1-162-622-11	CERAMIC	330PF	10%	6.3V	

DIODE

Ref.No.	Part No.	Description	Remark
D701	8-719-911-19	DIODE 1SS119	
D702	8-719-911-19	DIODE 1SS119	
D703	8-719-911-19	DIODE 1SS119	

COIL

Ref.No.	Part No.	Description	Remark
L701	1-408-450-31	MICRO INDUCTOR 47UH	

TRANSISTOR

Ref.No.	Part No.	Description	Remark
Q701	8-729-178-54	TRANSISTOR 2SC2785	
Q702	8-729-326-11	TRANSISTOR 2SC2611	
Q703	8-729-178-54	TRANSISTOR 2SC2785	
Q704	8-729-326-11	TRANSISTOR 2SC2611	
Q705	8-729-178-54	TRANSISTOR 2SC2785	
Q706	8-729-326-11	TRANSISTOR 2SC2611	

RESISTOR

Ref.No.	Part No.	Description				Remark
R701	1-202-838-00	SOLID	100K		1/2W	
R702	1-216-395-00	METAL OXIDE	3.3	5%	3W	F
R703	1-202-842-51	SOLID	220K		1/2W	
R704	1-202-846-00	SOLID	470K		1/2W	
R705	1-202-837-00	SOLID	82K		1/2W	
R706	1-202-549-00	SOLID	100	10%	1/2W	
R707	1-202-838-00	SOLID	100K		1/2W	
R708	1-202-824-00	SOLID	3.3K		1/2W	
R709	1-202-824-00	SOLID	3.3K		1/2W	
R711	1-247-819-00	CARBON	330	5%	1/6W	
R712	1-247-819-00	CARBON	330	5%	1/6W	
R713	1-202-824-00	SOLID	3.3K		1/2W	
R714	1-249-421-11	CARBON	2.2K	5%	1/6W	
R715	1-247-841-00	CARBON	2.7K	5%	1/6W	
R716	1-249-414-11	CARBON	560	5%	1/6W	
R718	1-247-807-00	CARBON	100	5%	1/6W	
R719	1-247-837-00	CARBON	1.8K	5%	1/6W	
R720	1-249-414-11	CARBON	560	5%	1/6W	
R722	1-206-692-00	METAL OXIDE	15K	5%	2W	F
R723	1-247-823-00	CARBON	470	5%	1/6W	
R725	1-249-421-11	CARBON	2.2K	5%	1/6W	
R726	1-247-807-00	CARBON	100	5%	1/6W	
R727	1-249-419-11	CARBON	1.5K	5%	1/6W	
R728	1-247-823-00	CARBON	470	5%	1/6W	
R729	1-247-819-00	CARBON	330	5%	1/6W	
R730	1-206-692-00	METAL OXIDE	15K	5%	2W	F
R732	1-247-818-00	CARBON	300	5%	1/6W	
R733	1-247-841-00	CARBON	2.7K	5%	1/6W	
R734	1-249-421-11	CARBON	2.2K	5%	1/6W	
R735	1-247-807-00	CARBON	100	5%	1/6W	
R737	1-206-692-00	METAL OXIDE	15K	5%	2W	F
R738	1-202-848-00	SOLID	680K		1/2W	
R739	1-202-838-00	SOLID	100K		1/2W	

VARIABLE RESISTOR

Ref.No.	Part No.	Description	Remark
RV701	⚠1-230-619-11	RES, ADJ, METAL GLAZE 110M	
RV702	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K	
RV703	1-228-721-00	RES, ADJ, CERAMIC CARBON 2.2K	
RV704	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K	
RV705	1-228-721-00	RES, ADJ, CERAMIC CARBON 2.2K	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description			Remark
RV706	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K			
RV707	1-228-725-00	RES, ADJ, CERAMIC CARBON 22K			
RV708	1-226-114-00	RES, ADJ, METAL GLAZE 2.2M			

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	*A-1345-582-A	D BOARD, COMPLETE *****************			
	3-701-833-01	HEAD, WASHER, TAPPING SCREW			
	4-302-428-00	HEAD, WASHER, TAPPING SCREW			
		CAPACITOR			
C651	1-123-933-00	ELECT	10MF	20%	160V
C653	1-123-933-00	ELECT	10MF	20%	160V
C1502	1-108-630-91	MYLAR	0.022MF	10%	100V
C1503	1-102-989-00	CERAMIC	68PF	5%	500V
C1504	1-106-192-00	MYLAR	0.0068MF	10%	100V
C1505	1-123-345-00	ELECT	100MF	20%	35V
C1506	1-123-307-00	ELECT	100MF	20%	10V
C1507	1-123-587-00	ELECT	560MF	10%	25V
C1508	1-123-332-00	ELECT	47MF	20%	25V
C1509	1-123-356-00	ELECT	10MF	20%	50V
C1510	1-123-356-00	ELECT	10MF	20%	50V
C1513	1-108-614-91	MYLAR	0.001MF	10%	100V
C1514	1-108-689-11	MYLAR	0.0056MF	10%	200V
C1515	1-123-379-00	ELECT	0.47MF	20%	50V
C1516	1-102-030-00	CERAMIC	330PF	10%	500V
C1519⚠	1-162-135-51	CERAMIC	560PF	10%	2KV
C1520⚠	1-136-309-11	FILM	0.0075MF	3%	1.4KV
C1521⚠	1-162-134-51	CERAMIC	470PF	10%	2KV
C1522	1-106-196-00	MYLAR	0.01MF	10%	100V
C1523	1-162-114-00	CERAMIC	0.0047MF		2KV
C1524	1-123-024-00	ELECT	33MF		160V
C1525	1-123-933-00	ELECT	10MF	20%	160V
C1526	1-123-347-00	ELECT	330MF	20%	35V
C1527	1-123-337-00	ELECT	1000MF	20%	25V
C1528	1-102-212-00	CERAMIC	820PF	10%	500V
C1529	1-102-212-00	CERAMIC	820PF	10%	500V
C1531	1-108-425-00	MYLAR	0.022MF	10%	200V
C1532	1-108-634-81	MYLAR	0.047MF	10%	100V
C1533	1-106-369-00	MYLAR	0.012MF	10%	200V
C1534	1-123-346-00	ELECT	220MF	20%	35V
C1535	1-129-928-00	FILM	0.0027MF	10%	630V
	*4-875-455-31	COVER (DIA. 20), CAPACITOR; C1535			
C1537	1-124-192-00	ELECT	4.7MF	20%	50V
C1538	1-102-228-00	CERAMIC	470PF	10%	500V
C1539	1-123-943-00	ELECT	1MF	20%	250V
C1540	1-136-308-11	FILM	0.68MF	5%	200V
C1541	1-136-116-00	FILM	1MF	5%	200V
C1542	1-108-433-00	MYLAR	0.1MF	10%	200V
C1543	1-162-318-11	CERAMIC	0.001MF	10%	500V
C1544	1-123-332-00	ELECT	47MF	20%	25V
C1545	1-123-933-00	ELECT	10MF	20%	160V

Ref.No.	Part No.	Description			Remark
C1547	1-102-978-00	CERAMIC	220PF	5%	50V
C1550⚠	1-136-312-51	FILM	0.043MF	5%	400V
C1554	1-161-830-00	CERAMIC	0.0047MF		500V
C1555	1-123-947-00	ELECT	10MF	20%	250V
		CONNECTOR			
D1	*1-508-767-00	5P PLUG			
D2	*1-564-440-11	PLUG, CONNECTOR (2.5MM) 4P			
D3	*1-564-442-11	PLUG, CONNECTOR (2.5MM) 6P			
D4	*1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P			
D5	*1-508-768-00	6P PLUG			
DY1	*1-564-038-00	CONNECTOR PLUG, DY (MINI) 6P			
		DIODE			
D651	8-719-200-02	DIODE 10E2			
D1502	8-719-200-02	DIODE 10E2			
D1503	8-719-200-02	DIODE 10E2			
D1504	8-719-200-02	DIODE 10E2			
D1506	8-719-300-65	DIODE ES1F			
D1507	8-719-300-76	DIODE RH-1A			
D1508	8-719-901-93	DIODE V19E			
D1509	8-719-921-53	DIODE RGP15G			
D1510	8-719-300-65	DIODE ES1F			
D1511	8-719-903-29	DIODE ERB43-04			
D1512	8-719-305-15	DIODE GH3F			
D1513	8-719-928-08	DIODE ERD28-08S			
D1514	8-719-903-29	DIODE ERB43-04			
D1515	8-719-100-43	DIODE RD7.5E-B1			
D1520	8-719-901-93	DIODE V19E			
		IC			
IC651⚠	8-749-930-35	IC STR3035			
	4-369-267-01	SPACER, MICA; IC651			
IC1501⚠	8-759-105-82	IC UPC1378H-P			
IC1502	8-759-145-58	IC UPC4558C			
		COIL			
L1501⚠	1-459-570-11	HLC			
L1502	1-459-390-00	COIL (WITH CORE)			
L1503	1-408-239-00	MICRO INDUCTOR 4.7MMH			
L1504	1-408-349-00	COIL, CHOKE			
L1505	1-407-365-00	COIL, CHOKE			
L1506	1-408-938-00	MICRO INDUCTOR 22UH			
L1507⚠	1-407-696-11	MICRO INDUCTOR 18UH			
L1508⚠	1-407-699-11	MICRO INDUCTOR 33UH			
L1509	1-459-407-00	COIL, FERRITE CHOKE			
L1510	1-459-075-00	COIL, DYNAMIC CONVERSION CHOKE			
L1511	1-459-104-00	COIL, DUST CORE			
L1512	1-459-313-00	COIL WITH CORE (HWC)			
L1513	1-407-695-00	MICRO INDUCTOR 15UH			
		NEON LAMP			
NL1501	1-519-237-11	LAMP, NEON			

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Ref.No.	Part No.	Description	Remark
		TRANSISTOR	
Q1501⚠	8-729-313-42	TRANSISTOR 2SD1134-C	
Q1502	8-729-168-82	TRANSISTOR 2SC2688	
Q1503	8-729-203-80	TRANSISTOR 2SD1555-LB-S1	
		RESISTOR	
R651	1-247-719-11	CARBON 3.3K 5% 1/4W	
R652	1-247-895-00	CARBON 470K 5% 1/6W	
R653	1-216-463-00	METAL OXIDE 12K 5% 2W	F
R654 ⚠	1-249-401-51	CARBON 47 5% 1/6W	F
R1501	1-247-713-11	CARBON 1K 5% 1/4W	
R1502	1-247-230-00	CARBON 390 5% 1/2W	
R1503	1-247-721-11	CARBON 4.7K 5% 1/4W	
R1504	1-215-373-31	METAL 10 1% 1/6W	
R1505	1-247-702-11	CARBON 150 5% 1/4W	
R1506	1-247-719-11	CARBON 3.3K 5% 1/4W	
R1507	1-247-704-11	CARBON 220 5% 1/4W	
R1508	1-247-697-11	CARBON 56 5% 1/4W	
R1509	1-216-349-00	METAL OXIDE 1 5% 1W	F
R1510	1-247-133-00	CARBON 1.2K 5% 1/4W	
R1511	1-247-163-00	CARBON 22K 5% 1/4W	
R1512	1-249-429-11	CARBON 10K 5% 1/6W	
R1514	1-247-879-00	CARBON 100K 5% 1/6W	
R1515	1-246-535-00	CARBON 390K 5% 1/4W	
R1517	1-247-851-00	CARBON 6.8K 5% 1/6W	
R1518	1-249-433-11	CARBON 22K 5% 1/6W	
R1519	1-246-511-00	CARBON 39K 5% 1/4W	
R1520	1-247-719-11	CARBON 3.3K 5% 1/4W	
R1521	1-247-711-11	CARBON 680 5% 1/4W	F
R1522⚠	1-216-428-51	METAL OXIDE 180 5% 1W	F
R1523	1-216-451-11	METAL OXIDE 120 5% 2W	F
R1524	1-215-863-11	METAL OXIDE 100 5% 1W	F
R1525	1-213-140-00	METAL OXIDE 560 5% 1W	F
R1526	1-247-764-11	CARBON 10K 5% 1/2W	F
R1527	1-216-344-00	METAL OXIDE 0.39 5% 1W	F
R1528⚠	1-216-353-51	METAL OXIDE 2.2 5% 1W	F
R1529	1-247-843-00	CARBON 3.3K 5% 1/6W	
R1530	1-247-713-11	CARBON 1K 5% 1/4W	
R1532	1-215-876-00	METAL OXIDE 15K 5% 1W	F
R1533	1-216-445-11	METAL OXIDE 12 5% 2W	F
R1534	1-249-389-11	CARBON 4.7 5% 1/6W	F
R1535	1-215-870-11	METAL OXIDE 1.5K 5% 1W	F
R1537	1-215-863-11	METAL OXIDE 100 5% 1W	F
R1538⚠	1-249-410-51	CARBON 270 5% 1/6W	F
R1539	1-249-437-11	CARBON 47K 5% 1/6W	F
R1540	1-247-823-00	CARBON 470 5% 1/6W	
R1541	1-249-415-11	CARBON 680 5% 1/6W	F
R1569⚠	1-249-398-51	CARBON 27 5% 1/6W	F
		VARIABLE RESISTOR	
RV1501	1-228-726-00	RES, ADJ, CERAMIC CARBON 33K	
RV1502	1-228-725-00	RES, ADJ, CERAMIC CARBON 22K	

Ref.No.	Part No.	Description	Remark
RV1503	1-228-720-00	RES, ADJ, CERAMIC CARBON 1K	
RV1504	1-228-718-00	RES, ADJ, CERAMIC CARBON 330	
		SWITCH	
S1501	1-554-186-00	SWITCH, LEVER	
		SPARK GAP	
SG1501	1-519-063-XX	DISCHARGING GAP	
		TRANSFORMER	
T1501	1-437-090-00	HDT	
T1502⚠	1-421-838-11	TRANSFORMER, FERRITE	
***			
	*1-617-432-11	T2 BOARD ********	
		IC	
IC001	8-741-131-70	IC BX-1317	
***			
	*1-617-431-11	T1 BOARD ********	
	*4-379-157-01	HOLDER, LED	
		DIODE	
D001	8-719-311-23	DIODE SEL112NP-N	
D002	8-719-114-34	DIODE SY432D	
D003	8-719-311-23	DIODE SEL112NP-N	
D004	8-719-311-23	DIODE SEL112NP-N	
***			
	*1-617-510-11	U2 BOARD ********	
***			
	*1-617-511-11	U3 BOARD ********	
		SWITCH	
S1402⚠	1-554-303-11	SWITCH, KEY BOARD	
***			
	*A-1389-735-A	U1 BOARD COMPLETE *****************	
		CAPACITOR	
C1401	1-123-322-00	ELECT 330MF 20% 16V	
C1403	1-124-445-00	ELECT 100MF 20% 16V	
C1404	1-124-445-00	ELECT 100MF 20% 16V	

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Ref.No.	Part No.	Description			Remark
C1405	1-124-119-00	ELECT	330MF	20%	16V
C1406	1-123-318-00	ELECT	33MF	20%	16V
C1407	1-101-004-00	CERAMIC	0.01MF		50V
C1408	1-101-004-00	CERAMIC	0.01MF		50V
C1409	1-123-332-00	ELECT	47MF	20%	25V
C1410	1-124-119-00	ELECT	330FM	20%	16V
C1411	1-123-369-00	ELECT	4.7MF	20%	50V
C1412	1-124-290-00	ELECT	47MF	20%	10V
C1413	1-124-475-11	ELECT	470MF	20%	16V
C1414	1-124-445-00	ELECT	100MF	20%	16V
C1415	1-101-004-00	CERAMIC	0.01MF		50V
C1416	1-124-290-00	ELECT	47MF	20%	10V
C1417	1-124-445-00	ELECT	100MF	20%	16V
C1418	1-101-004-00	CERAMIC	0.01MF		50V
C1419	1-124-473-11	ELECT	1000MF	20%	10V
C1420	1-123-369-00	ELECT	4.7MF	20%	50V
C1421	1-123-322-00	ELECT	330MF	20%	16V
C1422	1-123-332-00	ELECT	47MF	20%	25V
C1423	1-124-475-11	ELECT	470MF	20%	16V
C1424	1-124-475-11	ELECT	470MF	20%	16V
	4-354-557-00	CAP (DIA.10); C1424			
C1425	1-124-479-11	ELECT	330MF	20%	25V
C1426	1-102-514-00	CERAMIC	22PF	5%	50V
C1427	1-124-445-00	ELECT	100MF	20%	16V
C1430	1-123-380-00	ELECT	1MF	20%	50V
C1431	1-123-356-00	ELECT	10MF	20%	16V
C1432	1-123-356-00	ELECT	10MF	20%	16V
C1433	1-123-356-00	ELECT	10MF	20%	16V
C1434	1-123-380-00	ELECT	1MF	20%	50V
C1435	1-123-356-00	ELECT	10MF	20%	16V
C1436	1-123-356-00	ELECT	10MF	20%	16V
C1437	1-123-356-00	ELECT	10MF	20%	16V
C1439	1-124-119-00	ELECT	330MF	20%	16V
C1445	1-123-356-00	ELECT	10MF	20%	16V
C1456	1-123-356-00	ELECT	10MF	20%	16V
C1457	1-123-356-00	ELECT	10MF	20%	16V
C1461	1-123-380-00	ELECT	1MF	20%	50V
C1462	1-123-380-00	ELECT	1MF	20%	50V
	4-354-556-00	CAP (DIA.5);C1462			
C1474	1-123-356-00	ELECT	10MF	20%	16V
C1479	1-123-380-00	ELECT	1MF	20%	50V
C1483	1-123-380-00	ELECT	1MF	20%	50V
C1484	1-123-356-00	ELECT	10MF	20%	16V
C1485	1-123-356-00	ELECT	10MF	20%	16V
C1486	1-123-380-00	ELECT	1MF	20%	50V
C1487	1-123-356-00	ELECT	10MF	20%	16V
C1488	1-123-380-00	ELECT	1MF	20%	50V
C1489	1-123-356-00	ELECT	10MF	20%	16V
	4-354-556-00	CAP (DIA. 5); C1489			
C1499⚠.	1-161-742-51	CERAMIC	0.0022MF	20%	400V

DIODE

D1401	8-719-815-55	DIODE 1S1555
D1402	8-719-102-91	DIODE RD10E-N3
D1403	8-719-815-55	DIODE 1S1555

MODULE

IC1401⚠.	1-235-783-11	INSULATED MODULE, VIDEO(IVM-1)
IC1403⚠.	1-235-783-11	INSULATED MODULE, VIDEO(IVM-1)
IC1404⚠.	1-235-784-11	INSULATED MODULE, AUDIO(IAM-1)
IC1405⚠.	1-235-784-11	INSULATED MODULE, AUDIO(IAM-1)
IC1407⚠.	1-235-784-11	INSULATED MODULE, AUDIO(IAM-1)
IC1408⚠.	1-235-784-11	INSULATED MODULE, AUDIO(IAM-1)

IC

IC1402	8-759-140-66	IC UPD4066BC
IC1406	8-759-140-66	IC UPD4066BC
⚠IC1409.	8-719-927-74	PC817-C
IC1410	8-752-006-10	IC CX20061
IC1411	8-752-006-10	IC CX20061

COIL

L1402	1-408-397-00	MICRO INDUCTOR 1UH

TRANSISTOR

Q1401	8-729-178-54	TRANSISTOR 2SC2785
Q1402	8-729-177-43	TRANSISTOR 2SD774
Q1404	8-729-178-54	TRANSISTOR 2SC2785
Q1407	8-729-178-54	TRANSISTOR 2SC2785
Q1408	8-729-178-54	TRANSISTOR 2SC2785
Q1409	8-729-178-54	TRANSISTOR 2SC2785
Q1410	8-729-178-54	TRANSISTOR 2SC2785
Q1411	8-729-117-54	TRANSISTOR 2SA1175
Q1412	8-729-117-54	TRANSISTOR 2SA1175
Q1413	8-729-178-54	TRANSISTOR 2SC2785

RESISTOR

R1401	1-247-699-11	CARBON	82	5%	1/4W	
R1402	1-249-391-11	CARBON	6.8	5%	1/6W	F
R1403	1-249-391-11	CARBON	6.8	5%	1/6W	F
R1404	1-247-807-00	CARBON	100	5%	1/6W	
R1406	1-247-725-11	CARBON	10K	5%	1/4W	
R1407	1-247-135-00	CARBON	1.5K	5%	1/4W	
R1408	1-247-807-00	CARBON	100	5%	1/6W	
R1409	1-247-725-11	CARBON	10K	5%	1/4W	
R1410	1-247-700-11	CARBON	100	5%	1/4W	
R1411	1-247-711-11	CARBON	680	5%	1/4W	
R1412	1-247-815-00	CARBON	220	5%	1/6W	
R1413	1-247-847-00	CARBON	4.7K	5%	1/6W	
R1415	1-247-700-11	CARBON	100	5%	1/4W	
R1416	1-249-429-11	CARBON	10K	5%	1/6W	
R1417	1-249-429-11	CARBON	10K	5%	1/6W	
R1418	1-247-699-11	CARBON	82	5%	1/4W	
R1419	1-247-129-00	CARBON	820	5%	1/4W	
R1420	1-215-423-00	METAL	1.2K	1%	1/6W	
R1421	1-215-423-00	METAL	1.2K	1%	1/6W	
R1422	1-247-831-00	CARBON	1K	5%	1/6W	

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Ref.No.	Part No.	Description				Remark
R1423	1-249-391-11	CARBON	6.8	5%	1/6W	F
R1424	1-247-216-00	CARBON	100	5%	1/2W	F
R1425	1-247-873-00	CARBON	56K	5%	1/6W	
R1426	1-247-807-00	CARBON	100	5%	1/6W	
R1427	1-247-704-11	CARBON	220	5%	1/4W	
R1428	1-216-450-00	METAL OXIDE	82	5%	2W	F
R1429	1-247-873-00	CARBON	56K	5%	1/6W	
R1430	1-246-527-00	CARBON	180K	5%	1/4W	
R1431	1-249-391-11	CARBON	6.8	5%	1/6W	F
R1432	1-247-706-11	CARBON	330	5%	1/4W	
R1433	1-249-391-11	CARBON	6.8	5%	1/6W	F
R1434	1-246-527-00	CARBON	180K	5%	1/4W	
R1435	1-249-391-11	CARBON	6.8	5%	1/6W	F
R1436	1-249-391-11	CARBON	6.8	5%	1/6W	F
R1437	1-247-706-11	CARBON	330	5%	1/4W	
R1438	1-249-469-11	CARBON	100K	5%	1/4W	
R1439	1-247-706-11	CARBON	330	5%	1/4W	
R1440	1-249-429-11	CARBON	10K	5%	1/6W	
R1441	1-247-171-00	CARBON	47K	5%	1/4W	
R1442	1-247-706-11	CARBON	330	5%	1/4W	
R1443	1-247-713-11	CARBON	1K	5%	1/4W	
R1444	1-249-469-11	CARBON	100K	5%	1/4W	
R1445	1-247-725-11	CARBON	10K	5%	1/4W	
R1446	1-247-831-00	CARBON	1K	5%	1/6W	
R1447	1-247-173-00	CARBON	56K	5%	1/4W	
R1448	1-247-873-00	CARBON	56K	5%	1/6W	
R1449	1-247-173-00	CARBON	56K	5%	1/4W	
R1453	1-247-831-00	CARBON	1K	5%	1/6W	
R1454	1-247-713-11	CARBON	1K	5%	1/4W	
R1455	1-247-706-11	CARBON	330	5%	1/4W	
R1456	1-249-421-11	CARBON	2.2K	5%	1/6W	
R1457	1-249-421-11	CARBON	2.2K	5%	1/6W	
R1458	1-247-706-11	CARBON	330	5%	1/4W	
R1459	1-249-469-11	CARBON	100K	5%	1/4W	
R1460	1-249-433-11	CARBON	22K	5%	1/6W	
R1461	1-249-433-11	CARBON	22K	5%	1/6W	
R1462	1-247-807-00	CARBON	100	5%	1/6W	
R1463	1-249-433-11	CARBON	22K	5%	1/6W	
R1464	1-249-433-11	CARBON	22K	5%	1/6W	
R1465	1-247-899-00	CARBON	680K	5%	1/6W	
R1466	1-247-807-00	CARBON	100	5%	1/6W	
R1467	1-247-899-00	CARBON	680K	5%	1/6W	
R1469	1-247-873-00	CARBON	56K	5%	1/6W	
R1470	1-249-429-11	CARBON	10K	5%	1/6W	
R1471	1-247-171-00	CARBON	47K	5%	1/4W	
R1472	1-247-831-00	CARBON	1K	5%	1/6W	
R1473	1-247-879-00	CARBON	100K	5%	1/6W	
R1474	1-247-725-11	CARBON	10K	5%	1/4W	
R1475	1-247-713-11	CARBON	1K	5%	1/4W	
R1476	1-247-873-00	CARBON	56K	5%	1/6W	
R1477	1-247-873-00	CARBON	56K	5%	1/6W	
R1479	1-246-511-00	CARBON	39K	5%	1/4W	

Ref.No.	Part No.	Description				Remark
R1484	1-249-391-11	CARBON	6.8	5%	1/6W	F
R1485	1-249-391-11	CARBON	6.8	5%	1/6W	F
R1486	1-247-713-11	CARBON	1K	5%	1/4W	
R1487	1-249-391-11	CARBON	6.8	5%	1/6W	F
R1488	1-247-713-11	CARBON	1K	5%	1/4W	
R1489	1-249-391-11	CARBON	6.8	5%	1/6W	F
R1490	1-249-414-11	CARBON	560	5%	1/6W	
R1491	1-249-421-11	CARBON	2.2K	5%	1/6W	
R1492	1-247-887-00	CARBON	220K	5%	1/6W	
R1493	1-247-849-00	CARBON	5.6K	5%	1/6W	
R1494	1-249-429-11	CARBON	10K	5%	1/6W	
R1495	1-249-429-11	CARBON	10K	5%	1/6W	
R1496	1-247-887-00	CARBON	220K	5%	1/6W	
R1497	1-249-469-11	CARBON	100K	5%	1/4W	
R1498	1-249-469-11	CARBON	100K	5%	1/4W	
R1499	⚠1-202-726-51	SOLID	3.9M	10%	1/2W	

SWITCH

S1401	1-570-145-11	SWITCH, SLIDE

THERMISTOR

TH1401	1-800-627-00	THERMISTOR

CONNECTOR

U1	*1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P
U2	*1-564-441-11	PLUG, CONNECTOR (2.5MM) 5P
U3	*1-564-440-11	PLUG, CONNECTOR (2.5MM) 4P
U4	*1-564-442-11	PLUG, CONNECTOR (2.5MM) 6P

****

MISCELLANEOUS
****

	⚠.1-230-786-12	RESISTER ASSY, HIGH-VOLTAGE
	⚠.1-417-121-21	SELECTOR, ANTENNA
	⚠.1-451-268-11	DEFLECTION YOKE (SY-153C)
	1-452-032-00	MAGNET, DISK; 10MM ø
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ø
	1-452-277-00	MAGNET, BMC
	1-536-973-11	TERMINAL BOARD, INPUT/OUTPUT
	⚠.1-557-269-11	CORD, POWER
L901	⚠.1-426-227-23	COIL, DEMAGNETIZATION
SP901	1-503-258-21	SPEAKER
SP902	1-503-258-21	SPEAKER
T1503	⚠.1-439-351-21	TRANSFORMER ASSY, FLYBACK
TU101	⚠.1-463-603-11	TUNER, ET (BTP-201)
V901	⚠.8-736-951-05	CRT (A51JKQ10X)

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

ACCESSORIES AND PACKING MATERIALS

****

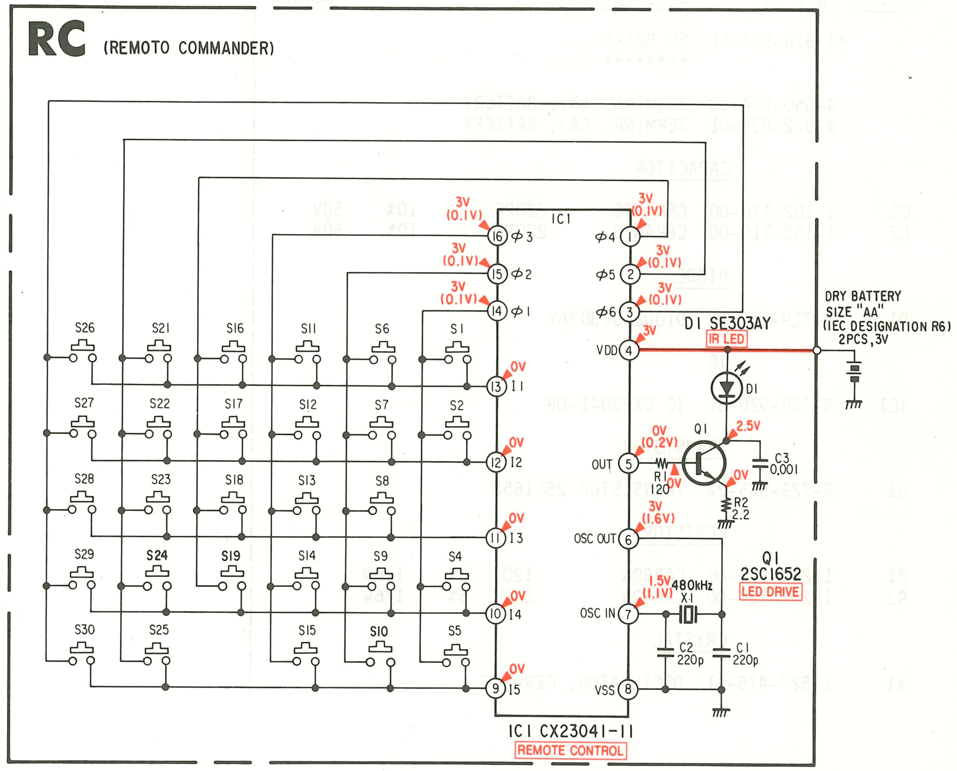
Part No.	Description	Remark
A-1470-719-A	COMMANDER ASSY (RM-735)	
⚠.1-417-135-11	MIXER, U/V	
1-501-329-11	ANTENNA, TELESCOPIC	
4-349-950-00	BAG, POLYETHYLENE	
4-377-015-01	BAG, PROTECTION	
*4-379-845-01	CUSHION (UPPER) (ASSY)	
*4-379-846-01	CUSHION (LOWER) (ASSY)	
*4-379-844-01	INDIVIDUAL CARTON	
4-482-191-22	MANUAL, INSTRUCTION	
4-491-213-22	INSTRUCTION	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

SECTION 7
REMOTE COMMANDER (RM-735)

7-1. SCHEMATIC DIAGRAM

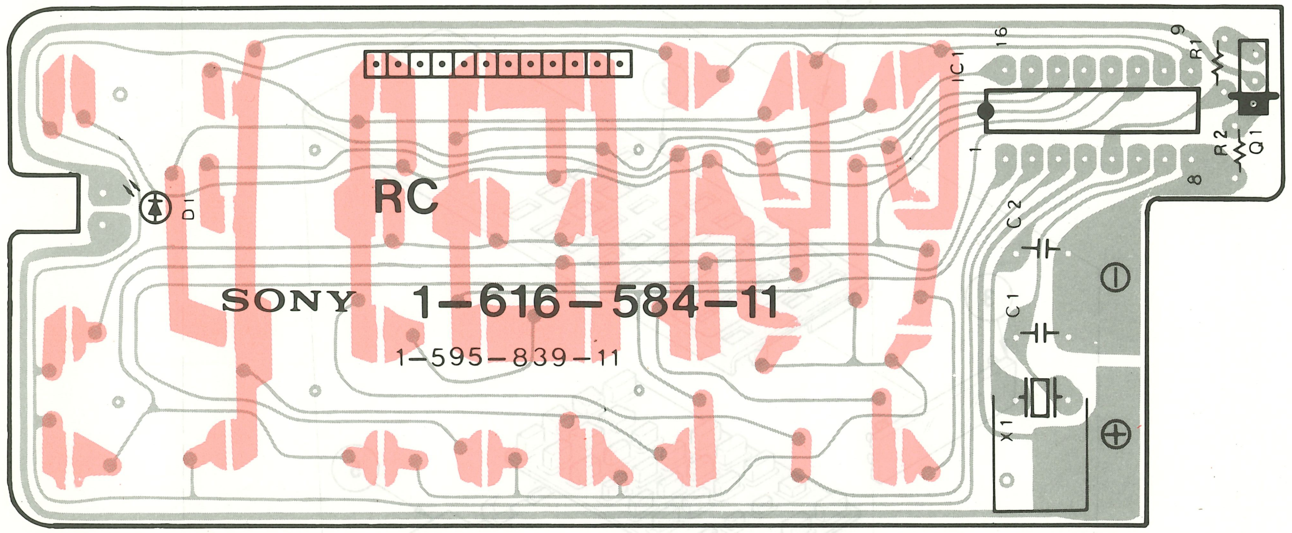
S1	CH+	S16	4
S2	CH−	S17	5
		S18	6
S4	TV / VIDEO	S19	PIC−
S5	MTS		
S6	0	S21	1
S7	JUMP	S22	2
S8	ENTER	S23	3
S9	VOL−	S24	PIC+
S10	CLEAR	S25	TIMER OFF / REPEAT
S11	7	S26	MUTING
S12	8	S27	SLEEP
S13	9	S28	POWER
S14	VOL+	S29	DISPLAY
S15	AM / PM	S30	TIMER / BLOCK


RC (REMOTO COMMANDER)
S26 S21 S16 S11 S6 S1
S27 S22 S17 S12 S7 S2
S28 S23 S18 S13 S8
S29 S24 S19 S14 S9 S4
S30 S25 S15 S10 S5
IC1
16 φ3 3V (0.1V)
15 φ2 3V (0.1V)
14 φ1 3V (0.1V)
13 I1 0V
12 I2 0V
11 I3 0V
10 I4 0V
9 I5 0V
φ4 1 3V (0.1V)
φ5 2 3V (0.1V)
φ6 3 3V (0.1V)
VDD 4 3V
OUT 5 0V (0.2V)
OSC OUT 6 3V (1.6V)
OSC IN 7 1.5V (1.1V)
VSS 8
D1 SE303AY
IR LED
D1
Q1
2.5V
0V
R1 120
0V
C3 0.001
R2 2.2
480kHz
X1
C2 220p
C1 220p
Q1 2SC1652
LED DRIVE
IC1 CX23041-11
REMOTE CONTROL
DRY BATTERY
SIZE "AA"
(IEC DESIGNATION R6)
2PCS, 3V

Note:
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 MΩ/V digital multimeter. No marking: S1 is depressed. ( ): no depressed.
- Voltage variations may be noted due to normal production tolerances.

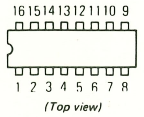
Rc

7-2. PRINTED WIRING BOARD – *Conductor Side* –

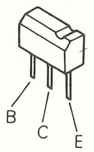

RC
SONY 1–616–584–11
1–595–839–11
D1
IC1
1
16
8
9
R1
R2
Q1
C2
C1
X1
⊖
⊕

- **SEMICONDUCTORS**

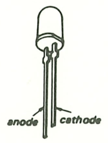
CX23041-11


16 15 14 13 12 11 10 9
1 2 3 4 5 6 7 8
(Top view)

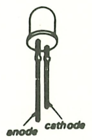
2SC1652



SE303AY

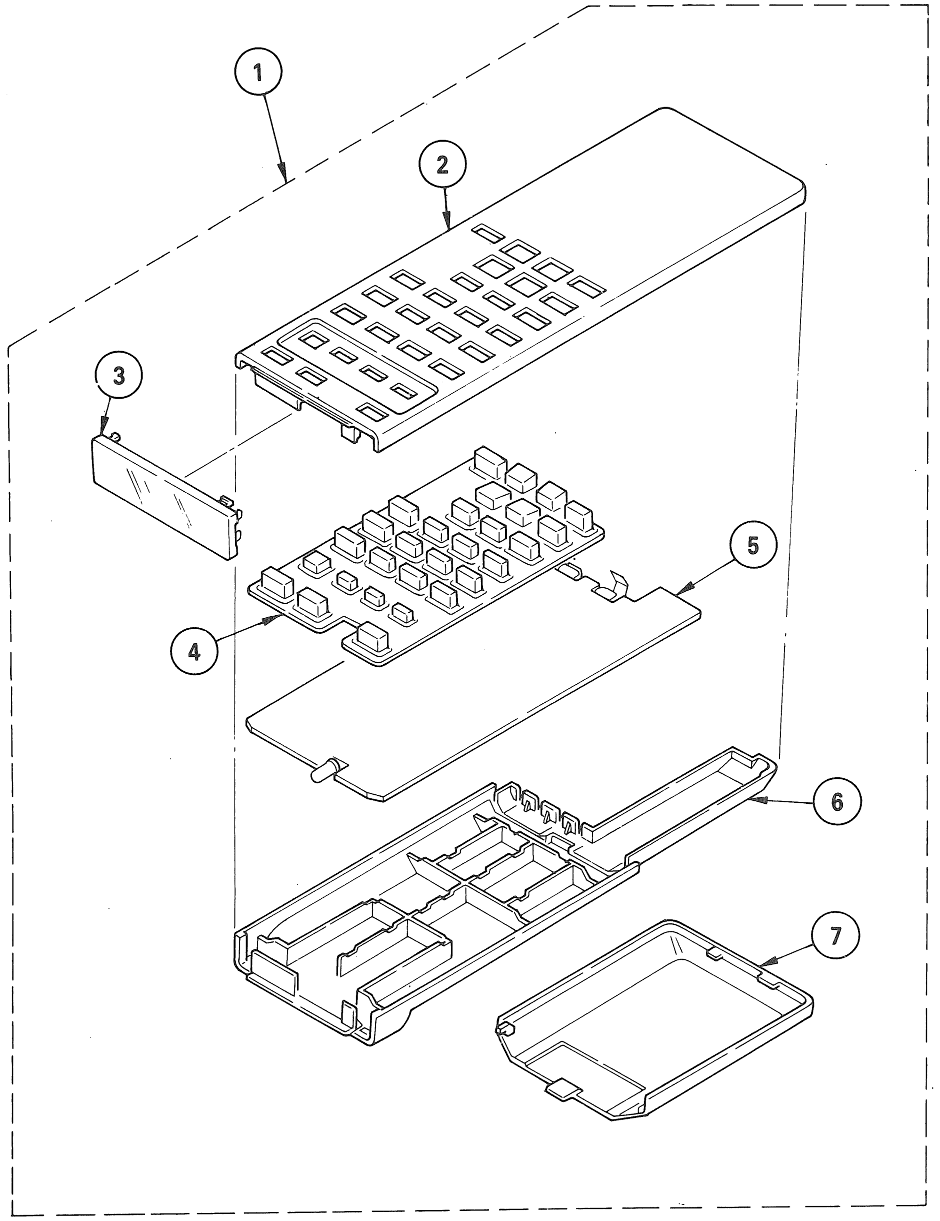

anode
cathode

SLR-932A


anode
cathode

7-3. EXPLODED VIEW

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



No.	Part No.	Description	Remark
1	A-1470-719-A	COMMANDER ASSY (RM-735)	2-7
2	X-4379-101-1	CASE ASSY, UPPER	
3	4-373-819-01	PLATE, FROSTED	
4	4-379-101-01	SHEET, POLISHING RUBBER	
5	*1-616-584-11	RC BOARD	
6	4-373-824-11	CASE, LOWER	
7	4-373-821-11	COVER, BATTERY	

7-4. ELECTRICAL PARTS LIST

NOTE:
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

When indicating parts by reference number, please include the board name.

CAPACITORS
- MF : μF, PF : μμF

RESISTORS
- All resistors are in ohms

Ref.No.	Part No.	Description	Remark
	*1-616-584-11	RC BOARD ********	
	4-350-924-00	TERMINAL (B), BATTERY	
	4-372-835-01	TERMINAL (A), BATTERY	
		CAPACITOR	
C1	1-102-110-00	CERAMIC 220PF 10% 50V	
C2	1-102-110-00	CERAMIC 220PF 10% 50V	
		DIODE	
D1	8-719-107-82	DIODE SE303AY	
		IC	
IC1	8-759-920-81	IC CX23041-09	
		TRANSISTOR	
Q1	8-729-965-22	TRANSISTOR 2SC1652	
		RESISTOR	
R1	1-247-809-00	CARBON 120 5% 1/6W	
R2	1-247-767-00	CARBON 2.2 5% 1/6W	
		CRYSTAL	
X1	1-527-476-41	OSCILLATOR, CERAMIC	

KV-2093
RM-73

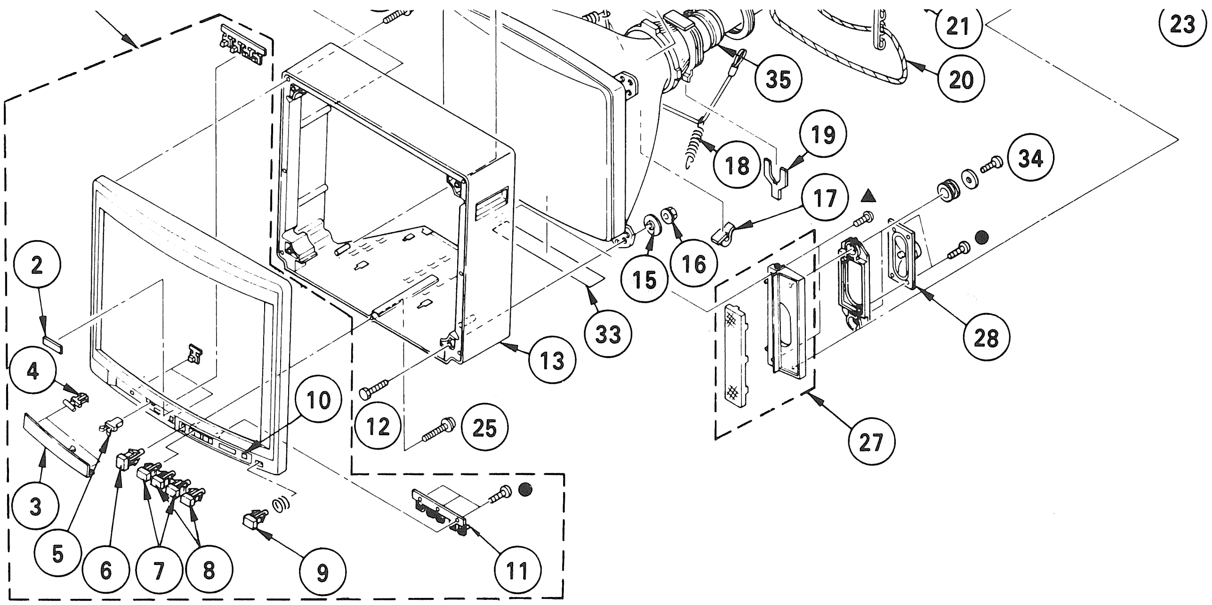
SONY
SERVICE MANUAL

US Model
Serial No. 7,029,801 and later
Chassis No. SCC-648V-A
March, 1987
No. 1

SUPPLEMENT

SUBJECT: CRT MODIFICATION

Page 15: EXPLODED VIEWS



No.	Part No.	Description	Remark
1	X-4379-104-1	BEZEL ASSY	2-11
2	4-374-115-01	EMBLEM, SONY	
3	4-374-275-21	DOOR, CONTROL	
4	3-662-365-00	SHAFT (S), DOOR	
5	4-374-714-01	CATCH, PUSH	
6	4-379-112-01	BUTTON (D)	
7	4-379-111-01	BUTTON (C)	
8	4-379-110-01	BUTTON (B)	
9	X-4379-102-1	BUTTON (A) ASSY	
10	4-379-114-01	PLATE, TRANSPARENT	
11	*4-379-113-01	HINGE (B), BUTTON	
12	3-703-025-12	BOLT M5, HEXAGON-HEAD	
13	4-379-117-01	CABINET	
14	⚠.8-738-752-05	CRT (A51JUH50X)	
15	4-373-615-02	WASHER, CRT POSITIONING	
16	4-306-034-00	FLANGE NUT, (B) 5MM	
17	3-703-961-01	SPACER, DY	
18	*4-375-394-01	SPRING, TENSION	
19	1-452-277-00	MAGNET, BMC	
20	⚠.1-426-227-23	COIL, DEMAGNETIZATION	
21	*4-374-720-01	BAND, COIL, DEGAUSS	
22	*A-1330-667-A	C BOARD, COMPLETE	
23	4-379-118-01	COVER, REAR	
24	*4-379-105-01	LABEL, MODEL NUMBER	
25	4-319-520-00	SCREW, SPECIAL (+PW4X30)	
26	*4-369-234-01	HOLDER, HV CABLE	
27	X-4374-220-2	PANEL ASSY, SP	
28	1-503-258-21	SPEAKER	
29	4-308-870-00	CLIP, LEAD WIRE	
30	1-452-032-00	MAGNET, DISK; 10MM ø	
31	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ø	
32	X-4309-608-0	PERMALLOY ASSY, CONVERGENCE	
33	4-370-595-01	CLOTH, BLOTTING	
34	4-314-843-00	SCREW, TAPPING, +4X12	
35	⚠.1-451-268-11	DEFLECTION YOKE (SY-153C)	

MICROFILM

Page 27: ELECTRICAL PARTS LIST

R1443	1-247-713-11	CARBON	1K	5%	1/4W
R1444	1-249-469-11	CARBON	100K	5%	1/4W
R1445	1-247-725-11	CARBON	10K	5%	1/4W
R1446	1-247-831-00	CARBON	1K	5%	1/6W
R1447	1-247-173-00	CARBON	56K	5%	1/4W
R1448	1-247-873-00	CARBON	56K	5%	1/6W
R1449	1-247-173-00	CARBON	56K	5%	1/4W
R1453	1-247-831-00	CARBON	1K	5%	1/6W
R1454	1-247-713-11	CARBON	1K	5%	1/4W
R1455	1-247-706-11	CARBON	330	5%	1/4W
R1456	1-249-421-11	CARBON	2.2K	5%	1/6W
R1457	1-249-421-11	CARBON	2.2K	5%	1/6W
R1458	1-247-706-11	CARBON	330	5%	1/4W
R1459	1-249-469-11	CARBON	100K	5%	1/4W
R1460	1-249-433-11	CARBON	22K	5%	1/6W
R1461	1-249-433-11	CARBON	22K	5%	1/6W
R1462	1-247-807-00	CARBON	100	5%	1/6W
R1463	1-249-433-11	CARBON	22K	5%	1/6W
R1464	1-249-433-11	CARBON	22K	5%	1/6W
R1465	1-247-899-00	CARBON	680K	5%	1/6W
R1466	1-247-807-00	CARBON	100	5%	1/6W
R1467	1-247-899-00	CARBON	680K	5%	1/6W
R1469	1-247-873-00	CARBON	56K	5%	1/6W
R1470	1-249-429-11	CARBON	10K	5%	1/6W
R1471	1-247-171-00	CARBON	47K	5%	1/4W
R1472	1-247-831-00	CARBON	1K	5%	1/6W
R1473	1-247-879-00	CARBON	100K	5%	1/6W
R1474	1-247-725-11	CARBON	10K	5%	1/4W
R1475	1-247-713-11	CARBON	1K	5%	1/4W
R1476	1-247-873-00	CARBON	56K	5%	1/6W
R1477	1-247-873-00	CARBON	56K	5%	1/6W
R1479	1-246-511-00	CARBON	39K	5%	1/4W

THERMISTOR

TH1401	1-800-627-00	THERMISTOR

CONNECTOR

U1	*1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P
U2	*1-564-441-11	PLUG, CONNECTOR (2.5MM) 5P
U3	*1-564-440-11	PLUG, CONNECTOR (2.5MM) 4P
U4	*1-564-442-11	PLUG, CONNECTOR (2.5MM) 6P

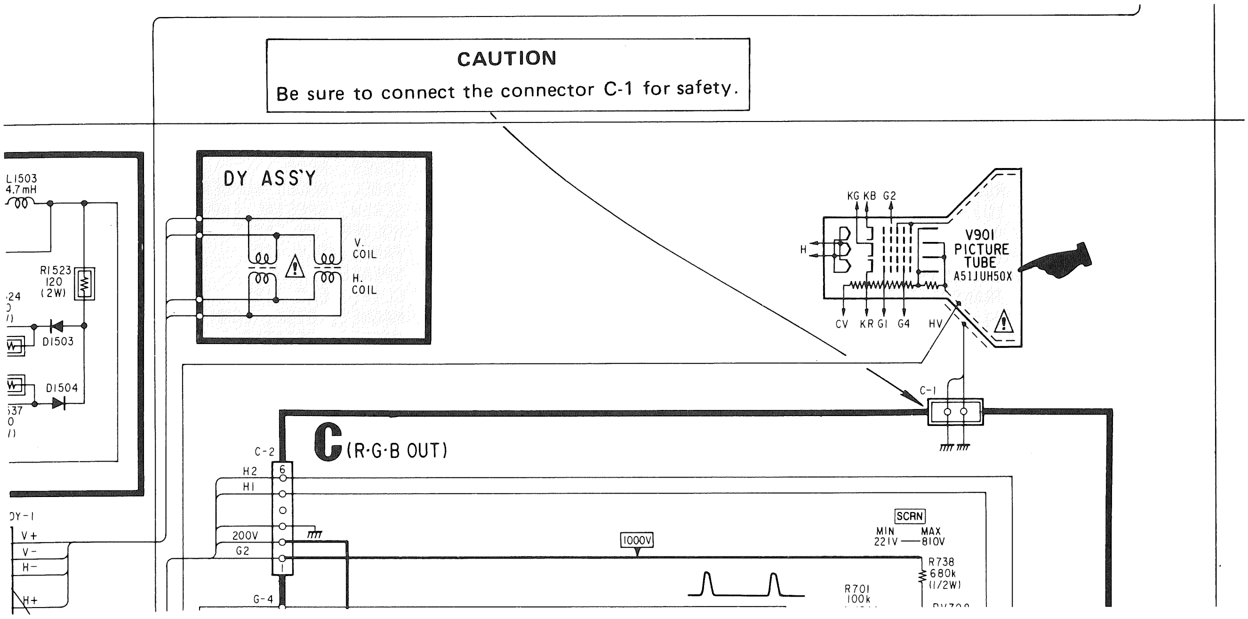
****

MISCELLANEOUS

****

	⚠.1-230-786-12	RESISTER ASSY, HIGH-VOLTAGE
	⚠.1-417-121-21	SELECTOR, ANTENNA
	⚠.1-451-268-11	DEFLECTION YOKE (SY-153C)
	1-452-032-00	MAGNET, DISK; 10MM ø
	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ø
	1-452-277-00	MAGNET, BMC
	1-536-973-11	TERMINAL BOARD, INPUT/OUTPUT
	⚠.1-557-269-11	CORD, POWER
L901	⚠.1-426-227-23	COIL, DEMAGNETIZATION
SP901	1-503-258-21	SPEAKER
SP902	1-503-258-21	SPEAKER
T1503	⚠.1-439-351-21	TRANSFORMER ASSY, FLYBACK
TU101	⚠.1-463-603-11	TUNER, ET (BTP-201)
V901	⚠.8-738-752-05	CRT (A51JUH50X)

SCHEMATIC DIAGRAM



CAUTION

Be sure to connect the connector C-1 for safety.

English
87CG0547-1
Printed in Japan
© 1987. 3

Sony Corporation
TV Group

KV-2093R
RM-735

SONY
SERVICE MANUAL

US Model
Chassis No. SCC-648V-A

SUPPLEMENT-2

File this Supplement with the Service Manual.

SUBJECT: MODIFICATION OF CIRCUIT

INTRODUCTION

Memory IC (IC102) on the A board will be replaced.
Consequently, the power supply circuit including zenor diode will be changed and IB block will be changed to new parts.
Contents of main modifications are as follows.

- A board Addition : C192
  Alteration : IC102
  Deletion : C603, C608, D606, R192, R193, R603, R604
- D board Deletion : C1554, C1555, D1520, R1569
- Parts to be replaced.

SECTION 5 ELECTRICAL PARTS LIST

A board: P24–27, 29

BOARD	OLD	NEW
A	---	C192 1-102-110-21 CERAMIC 220PF 10% 50V
	C603 1-161-830-00 CERAMIC 0.0047MF 500V	---
	C608 1-123-934-00 ELECT 22MF 20% 160V	---
	D606 8-719-924-06 DIODE ERC24-06S	---
	IC102 8-759-105-59 IC UPD6251C	IC102 8-752-321-18 IC CXK-1005P
	R192 1-247-133-00 CARBON 1.2K 5% 1/4W	---
	R193 1-244-887-51 CARBON 3.9K 5% 1/2W	---
	R603 1-216-431-11 METAL OXIDE 560 5% 1W F	---
	R604 1-215-896-00 METAL OXIDE 4.7K 5% 2W F	---

D board: P31, 32

D	C1554 1-161-830-00 CERAMIC 0.0047MF 500V	---
	C1555 1-123-947-00 ELECT 10MF 20% 250V	---
	D1520 8-719-901-93 DIODE V19E	---
	R1569 ⚠1-249-398-51 CARBON 27 5% 1/6W F	---

— Continued on next page —

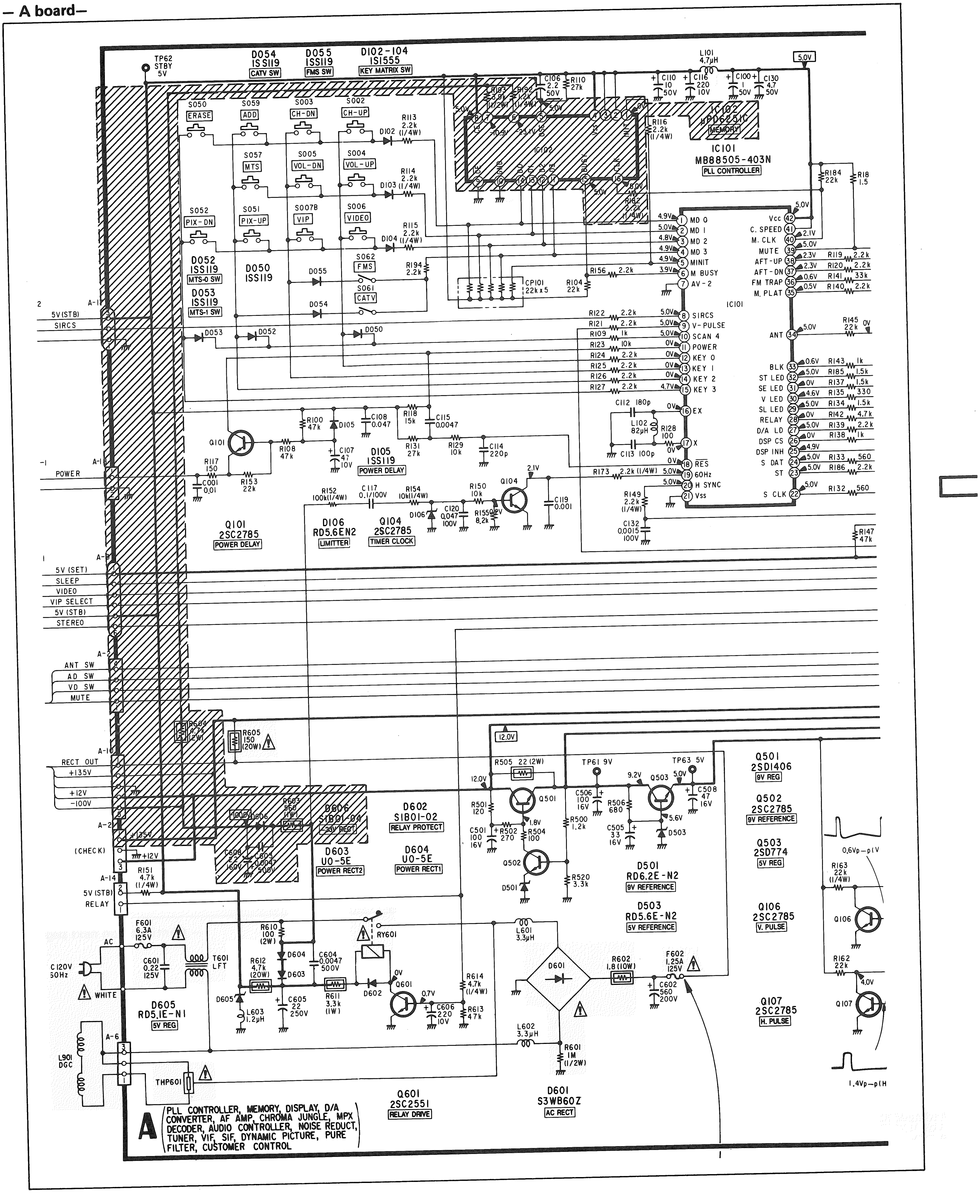
MICROFILM

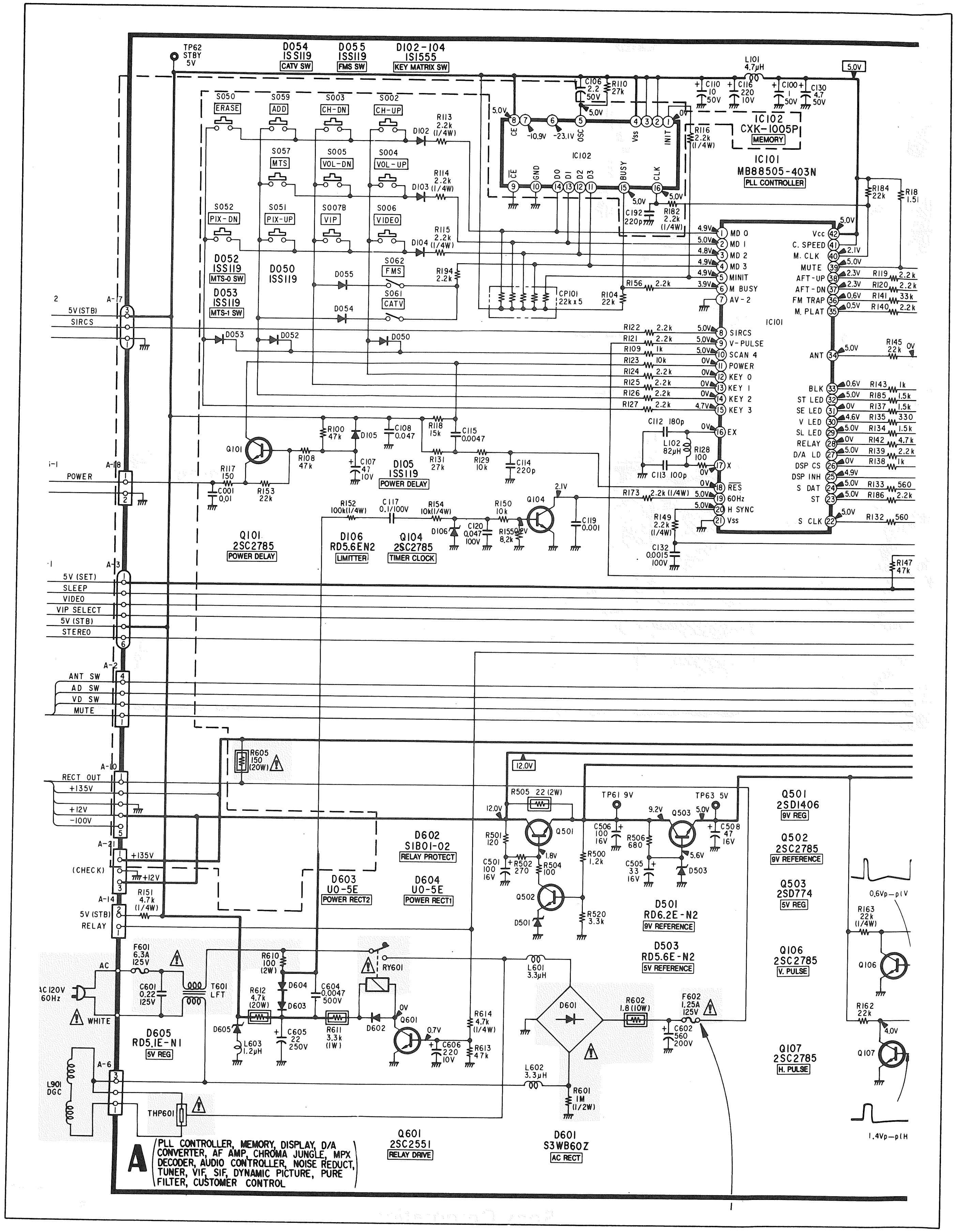
: alterated portion

▨ : deleted portion

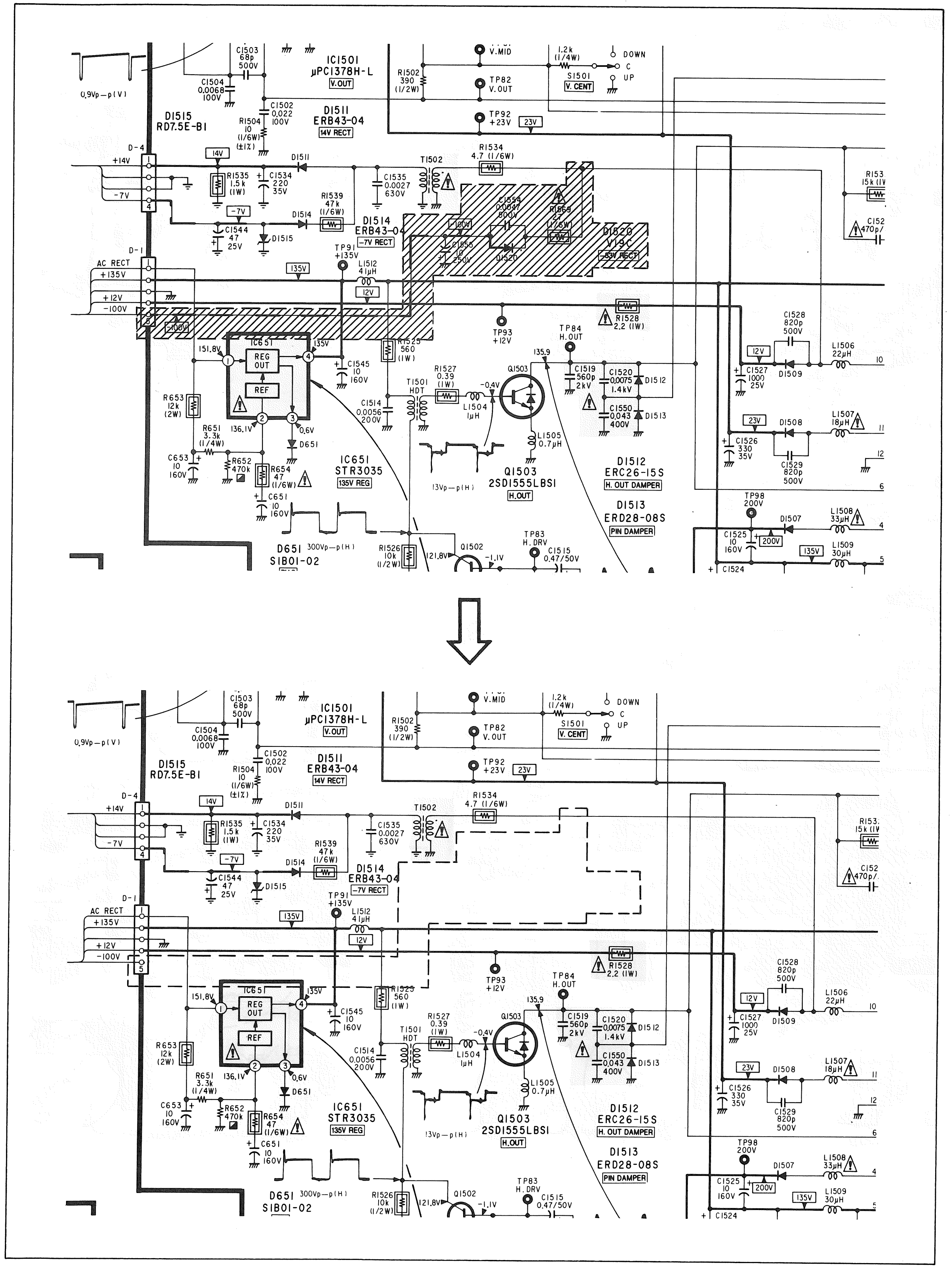
SCHEMATIC DIAGRAM

– A board–


TP62 STBY 5V
D054 1SS119 CATV SW
D055 1SS119 FMS SW
D102-104 1S1555 KEY MATRIX SW
L101 4.7μH
5.0V
S050 ERASE
S059 ADD
S003 CH-DN
S002 CH-UP
S057 MTS
S005 VOL-DN
S004 VOL-UP
S052 PIX-DN
S051 PIX-UP
S007B VIP
S006 VIDEO
S062 FMS
S061 CATV
D052 1SS119 MTS-0 SW
D050 1SS119
D053 1SS119 MTS-1 SW
IC102 μPD6251C MEMORY
IC101 MB88505-403N PLL CONTROLLER
CP101 22k x 5
MD 0
MD 1
MD 2
MD 3
MINIT
M BUSY
AV-2
SIRCS
V-PULSE
SCAN 4
POWER
KEY 0
KEY 1
KEY 2
KEY 3
EX
X
RES
60Hz
H SYNC
Vss
Vcc
C. SPEED
M. CLK
MUTE
AFT-UP
AFT-DN
FM TRAP
M. PLAT
ANT
BLK
ST LED
SE LED
V LED
SL LED
RELAY
D/A LD
DSP CS
DSP INH
S DAT
ST
S CLK
Q101 2SC2785 POWER DELAY
D105 1SS119 POWER DELAY
D106 RD5.6EN2 LIMITTER
Q104 2SC2785 TIMER CLOCK
5V (STB)
SIRCS
POWER
5V (SET)
SLEEP
VIDEO
VIP SELECT
5V (STB)
STEREO
ANT SW
AD SW
VD SW
MUTE
RECT OUT
+135V
+12V
-100V
(CHECK)
5V (STB)
RELAY
AC
C120V 50Hz
WHITE
L901 DGC
THP601
F601 6.3A 125V
T601 LFT
R605 150 (20W)
12.0V
TP61 9V
TP63 5V
D606 S1B01-04 -33V RECT
D602 S1B01-02 RELAY PROTECT
D603 U0-5E POWER RECT2
D604 U0-5E POWER RECT1
D605 RD5.1E-N1 5V REG
RY601
D601
F602 1.25A 125V
Q501 2SD1406 9V REG
Q502 2SC2785 9V REFERENCE
Q503 2SD774 5V REG
D501 RD6.2E-N2 9V REFERENCE
D503 RD5.6E-N2 5V REFERENCE
Q106 2SC2785 V. PULSE
Q107 2SC2785 H. PULSE
0.6Vp-p(V
1.4Vp-p(H
Q601 2SC2551 RELAY DRIVE
D601 S3WB60Z AC RECT
A
PLL CONTROLLER, MEMORY, DISPLAY, D/A CONVERTER, AF AMP, CHROMA JUNGLE, MPX DECODER, AUDIO CONTROLLER, NOISE REDUCT, TUNER, VIF, SIF, DYNAMIC PICTURE, PURE FILTER, CUSTOMER CONTROL

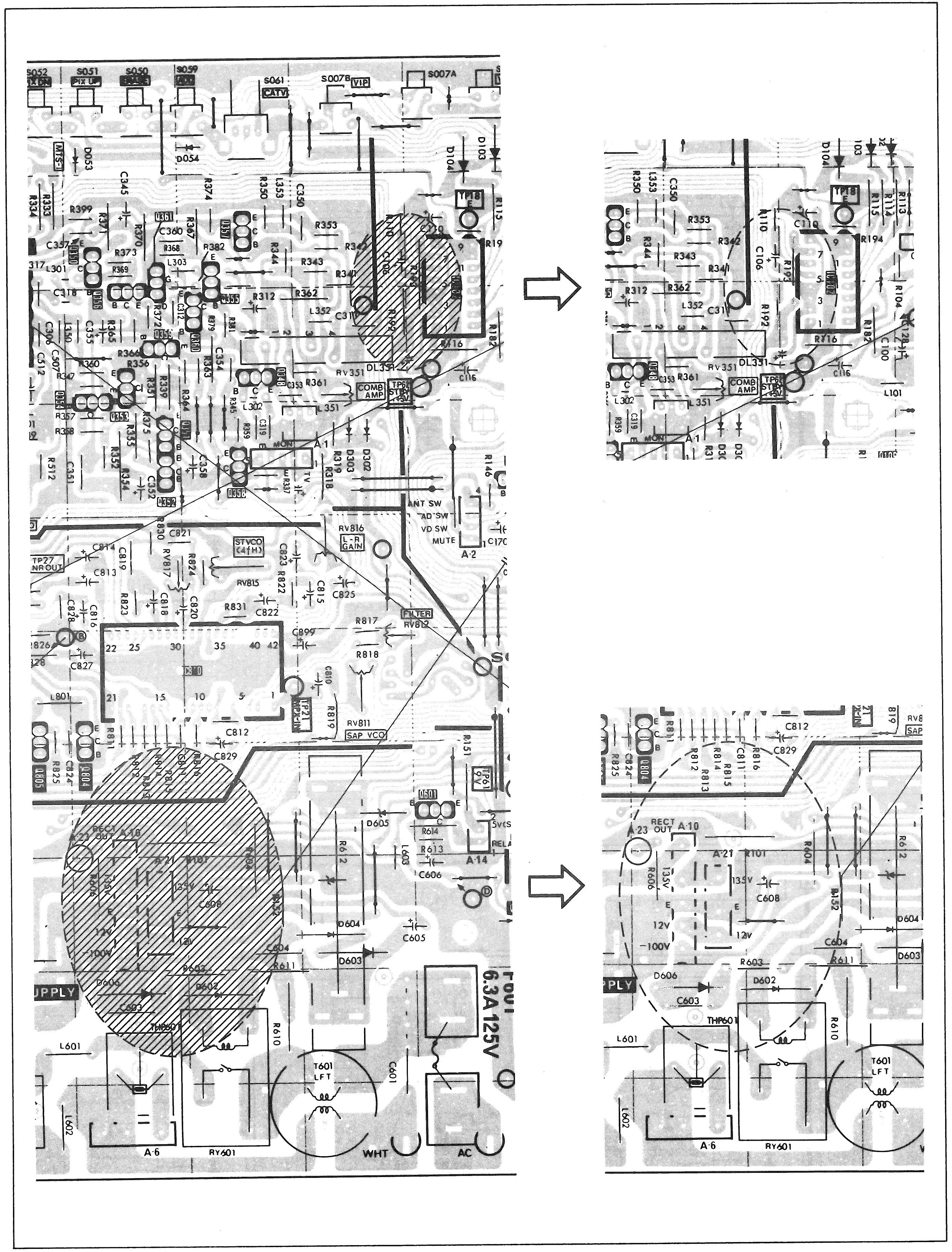

TP62 STBY 5V
D054 ISS119 CATV SW
D055 ISS119 FMS SW
D102-104 ISS55 KEY MATRIX SW
S050 ERASE
S059 ADD
S003 CH-DN
S002 CH-UP
S057 MTS
S005 VOL-DN
S004 VOL-UP
S052 PIX-DN
S051 PIX-UP
S007B VIP
S006 VIDEO
S062 FMS
S061 CATV
D052 ISS119 MTS-0 SW
D050 ISS119
D053 ISS119 MTS-1 SW
IC102 CXK-1005P MEMORY
IC101 MB88505-403N PLL CONTROLLER
L101 4.7μH
5.0V
MD 0
MD 1
MD 2
MD 3
MINIT
M BUSY
AV-2
SIRCS
V-PULSE
SCAN 4
POWER
KEY 0
KEY 1
KEY 2
KEY 3
EX
X
RES
60Hz
H SYNC
Vss
Vcc
C. SPEED
M. CLK
MUTE
AFT-UP
AFT-DN
FM TRAP
M. PLAT
ANT
BLK
ST LED
SE LED
V LED
SL LED
D/A LD
DSP CS
DSP INH
S DAT
ST
S CLK
CP101 22k x 5
Q101 2SC2785 POWER DELAY
D106 RD5.6EN2 LIMITTER
Q104 2SC2785 TIMER CLOCK
D105 ISS119 POWER DELAY
5V(STB)
SIRCS
POWER
5V (SET)
SLEEP
VIDEO
VIP SELECT
5V (STB)
STEREO
ANT SW
AD SW
VD SW
MUTE
RECT OUT
+135V
+12V
-100V
(CHECK)
5V (STB)
RELAY
R605 150 (20W)
12.0V
R505 22 (2W)
TP61 9V
TP63 5V
Q501 2SD1406 9V REG
Q502 2SC2785 9V REFERENCE
Q503 2SD774 5V REG
D602 S1B01-02 RELAY PROTECT
D603 U0-5E POWER RECT2
D604 U0-5E POWER RECT1
D501 RD6.2E-N2 9V REFERENCE
D503 RD5.6E-N2 5V REFERENCE
Q106 2SC2785 V. PULSE
Q107 2SC2785 H. PULSE
0.6Vp-p(V)
1.4Vp-p(H)
AC
AC 120V 60Hz
WHITE
F601 6.3A 125V
C601 0.22 125V
T601 LFT
D605 RD5.1E-N1 5V REG
L901 DGC
THP601
RY601
Q601 2SC2551 RELAY DRIVE
D601 S3WB60Z AC RECT
F602 1.25A 125V
R602 1.8 (10W)
L601 3.3μH
L602 3.3μH
A
PLL CONTROLLER, MEMORY, DISPLAY, D/A CONVERTER, AF AMP, CHROMA JUNGLE, MPX DECODER, AUDIO CONTROLLER, NOISE REDUCT, TUNER, VIF, SIF, DYNAMIC PICTURE, PURE FILTER, CUSTOMER CONTROL

– D board –

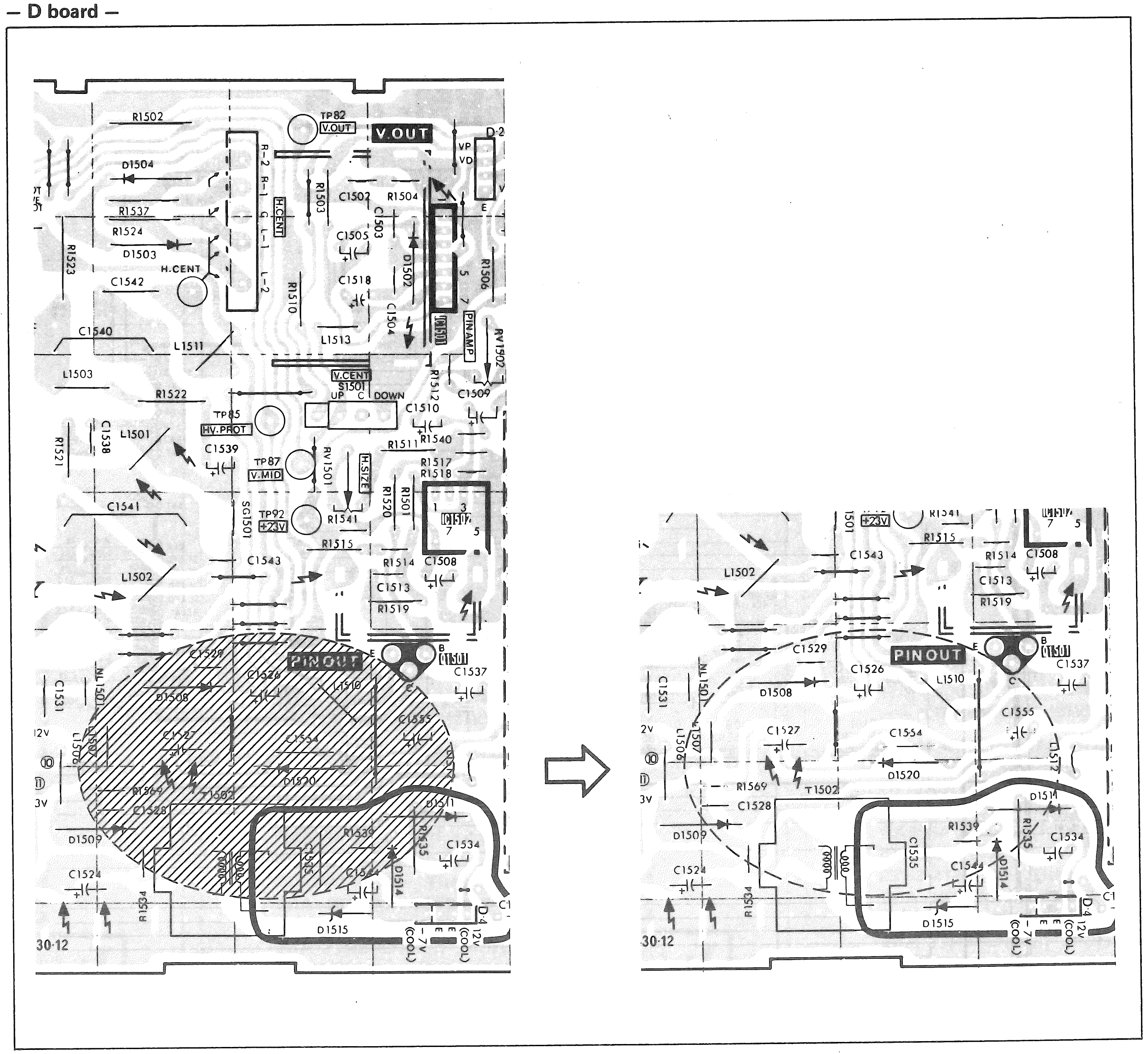

0.9Vp-p(V)
C1503 68p 500V
C1504 0.0068 100V
C1502 0.022 100V
IC1501 μPC1378H-L V.OUT
D1511 ERB43-04 14V RECT
D1515 RD7.5E-B1
R1502 390 (1/2W)
V.MID
TP82 V.OUT
TP92 +23V
S1501 V. CENT
DOWN
C
UP
D-4
+14V
-7V
R1535 1.5k (1W)
C1534 220 35V
C1535 0.0027 630V
T1502
R1534 4.7 (1/6W)
R1539 47k (1/6W)
D1514 ERB43-04 -7V RECT
C1544 47 25V
D1515
D1520 V19C -33V RECT
D-1
AC RECT
+135V
+12V
-100V
TP91 +135V
L1512 41μH
IC651
REG OUT
REF
R1525 560 (1W)
R1527 0.39 (1W)
T1501 HDT
L1504 1μH
Q1503
C1519 560p 2kV
C1520 0.0075 1.4kV
C1550 0.043 400V
D1512
D1513
R1528 2.2 (1W)
TP93 +12V
TP84 H.OUT
C1528 820p 500V
L1506 22μH
C1527 1000 25V
D1509
D1508
L1507 18μH
C1526 330 35V
C1529 820p 500V
TP98 200V
D1507
L1508 33μH
L1509 30μH
C1525 10 160V
C1524
R653 12k (2W)
R651 3.3k (1/4W)
C653 10 160V
R652 470k
R654 47 (1/6W)
C651 10 160V
D651
IC651 STR3035 135V REG
C1514 0.0056 200V
L1505 0.7μH
Q1503 2SD1555LBSI H.OUT
D1512 ERC26-15S H. OUT DAMPER
D1513 ERD28-08S PIN DAMPER
D651 S1B01-02
300Vp-p(H)
13Vp-p(H)
R1526 10k (1/2W)
Q1502
TP83 H. DRV
C1515 0.47/50V
151.8V
136.1V
135.9
121.8V
-0.4V
-1.1V

PRINTED WIRING BOARD

— A board —


S052
S051 PIX UP
S050
S059
S061 CATV
S007B VIP
S007A
D053
D054
D104
D103
TP18
R353
R342
R343
R341
R362
L352
C311
DL351
RV351
R361
COMB AMP
TP64 STBY +5V
L351
R416
ANT SW
AD SW
VD SW
MUTE
RV816 L-R GAIN
STVCO (4 fH)
RV815
TP27 NR OUT
C813
C821
C822
R831
C825
R817
R818
FILTER RV812
C899
22 25 30 35 40 42
21 15 10 5 1
TP21 MPX IN
RV811 SAP VCO
C812
C829
L801
R151
D601
D605
R614
R613
R612
L603
C606
A-14
A-23 RECT OUT
A-10
A-21
R101
135V
C608
12V
-100V
D604
C605
C604
R611
D603
R603
D602
D606
C603
THP601
SUPPLY
F601 6.3A 125V
L601
T601 LFT
R610
C601
L602
A-6
RY601
WHT
AC

— D board —


R1502
TP82 V.OUT
V.OUT
D1504
R1537
R1524
D1503
H.CENT
C1542
R1503
C1502
R1504
C1505
C1503
D1502
C1518
R1510
L1513
C1504
PINAMP
RV1502
C1540
L1511
L1503
V.CENT S1501 UP C DOWN
R1522
TP85 HV.PROT
C1539
TP87 V.MID
RV1501
H.SIZE
C1510
R1511
R1540
R1517
R1518
C1509
L1501
C1538
C1541
TP92 +24V
R1541
R1520
IC1512
R1515
C1543
L1502
R1514
C1508
C1513
R1519
PIN OUT
Q1501
C1537
C1529
C1526
L1510
D1508
C1527
C1554
C1555
R1569
T1502
C1528
D1520
D1511
R1539
R1535
C1534
D1509
C1535
C1544
D1514
C1524
R1534
D1515
30-12
(COOL) 7V
12V (COOL)

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TV Group

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